KERN GROUNDWATER AUTHORITY

Regular Meeting of Board of Directors
April 25, 2018, 8:00 a.m.
1115 Truxtun Ave., Bakersfield, CA 93301
3rd Floor – Conference Room

AGENDA

This meeting is held in accordance with the Brown Act pursuant to Section 54956 of the California Government Code and the Kern Fan Authority Joint Powers Agreement.

1. **Roll Call - Quorum Determination**
   In the absence of a quorum of the Board the meeting will be adjourned.

2. **Public Input**
   This portion of the meeting is set aside to provide the public an opportunity to bring to the attention of the Board matters of which the Board may not be aware and which are not on the current agenda. No action can be taken on any matter raised during this portion of the meeting; however, a Board member may request that the matter be placed on any future agenda for further review and possible action. Members of the public may directly address the Board of Directors on any item of interest within the Board's subject matter jurisdiction, before or during the Board's consideration of the item. The President may limit the time allowed for comment.

3. **Approval of Minutes**
   a. March 28, 2018 Regular Board Meeting Minutes*

4. **Treasurer's Report**
   a. Accounts Payable/Receivable*
   b. Presentation of 2016 Financial Audit - BHK
      i. Accept and file the 2016 Financial Audit *
      ii. Approve proposal for 2017 Financial Audit *

5. **Basin Coordinator/Planning Manager Report**
   a. Special Activities Agreement – Groundwater Modeling
      i. Approval of Cash Call amounts – Participation Percentages*
      ii. Approval of Todd Groundwater Cost Sharing Agreement with KRGSA *
   b. Approval to submit Agreement to KRGSA for RMC Peer Review cost sharing *

- Denotes Action Item

c. Approval of boundary adjustment with KRGSA & Lamont PUD *
d. GSP Development Schedule Status
e. Policy Coordination Meeting Update
f. Accomplishments
g. Forward Work Plan

6. **GSP Basin Setting Narrative –** Larry Rodriguez

7. New Business

This Portion of the Meeting is set aside to provide each Board member an opportunity to bring to the attention of other Board members and the public matters which have come to their attention and/or which may be appropriate for future consideration. No action can be taken on any matter raised during this portion of the meeting, however, a Board member may request that the matter be placed on any future agenda for further review and possible action.

8. Correspondence

9. Attorney(s) Report

10. Adjournment

A person with a qualifying disability under the Americans with Disabilities Act of 1990 may request the Authority provide disability-related modification or accommodation in order to participate in any public meeting of the Authority. Such assistance includes appropriate alternative formats for the agendas and agenda packets. Requests should be made in person, by telephone, facsimile and/or written correspondence to the Authority office, at least 48 hours before a public Authority meeting. Written materials related to an item on this agenda to be considered in open session that are public documents and that are distributed to board members after the posting of the agenda, will be made available for public inspection when they are so distribution at the office of the Authority located at 849 Allen Road, Bakersfield, California during normal business hours. Documents that are public documents provided by others during a meeting will be available at the same location during business hours after the meeting.

- Denotes Action Item

JPA Board Meeting Minutes
Kern Groundwater Authority
Wednesday, March 28, 2018

JPA DISTRICT REPRESENTATIVES AND ALTERNATES PRESENT

Raul Barraza Jr, Arvin Community Services District
Kevin Pascoe, Arvin-Edison WSD
John Gaugel, Cawelo WD
Michael James, City of Shafter
Royce Fast & Marty Milobar, KCWA
Andrew Pandol, Kern-Tulare WD
Bill Taube, Kern Water Bank Authority
Kevin Andrew, North Kern Water Storage District
Gary Unruh, Rosedale-Rio Bravo WSD
Rick Wegis, Semitropic WSD
Jim Regan, SSJMUD
Dana Munn, Shafter-Wasco ID
Gary Morris, West Kern WD
Greg Hammett & Rob Goff, Westside District Water Authority
Dennis Mullins & Michael Blaine, Wheeler Ridge-Maricopa WSD

JPA DISTRICT REPRESENTATIVES AND ALTERNATES ABSENT

Supervisor David Couch, County of Kern
Ryan Fachin, Tejon-Castaic WD

OTHERS PRESENT

Alan Peake, Arvin Community Services District
Jeevan Muhar, Arvin-Edison WSD
Steve Collup, Arvin-Edison WSD
Tim Ashlock, Buena Vista WSD
Dave Hampton, Cawelo WD
Jon Parker, Kern Water Bank Authority
Larry Rodriguez, GEI Consultants
Michelle Ricker, GEI Consultants
Max Bricker, Henry Miller WD
Dick Diamond, North Kern WSD
Alan Christensen, Kern County Administration Office
Florn Core, Kern County Administration Office
Gene Lundquist, ID4
Mark Mulkay, Kern Delta WD
Jacob Easton, Klein Law
Robert Kuhs, Kuhs Parker Law
Robert Hartsock, McMurtrey, Hartsock & Worth
Marinelle Duarosan, NKWSD
Valerie Kincaid, O'Laughlin, Paris, LLP

Pres Brittan, Pacific Resources
Rebecca Gomez, Provost & Pritchard
Terry Erlewine, Provost & Pritchard
Patty Poire, Kern Groundwater Authority
Lori Honea, Rosedale-Rio Bravo WSD
Eric Averett, Rosedale-Rio Bravo WSD
Roland Gross, SSJMUD
Sunny Kapoor, West Kern WD
George Cappello, Wheeler Ridge-Maricopa WSD
Tim Gobler, Wonderful Orchards
Jeff Patrick, Young Wooldridge
Devon Yurosek, Yurosek Farming
Don Wright
Taylor Blakslee, Hallmark Group
Jim Beck, Hallmark Group
Jeff Johnson, Chevron

1. Call to Order – Director Mullins called the meeting to order at 8:01 a.m. after it was confirmed there was a quorum. The Board met the threshold for a quorum under the JPA and operated under it.

2. Public Comments – None

3. Approval of Minutes
    a. February 28, 2018 Regular Board Meeting Minutes
    A motion was made by Director Taube and seconded by Director Andrew to approve the February 28, 2018 Regular Board Meeting Minutes. The motion was unanimously carried.

4. Treasurer's Report
    a. Accounts Payable/Receivable– Mr. Diamond presented the Treasurer's Report Memo for the period from February 1, 2018 through February 28, 2018. Exhibit A of the Treasurer's Report showed the KGA account balance for the month of February totaling $210,469, no deposits were made in the month of February and disbursements were made in the amount of $193,271 leaving a cash balance at the end of February of $17,198. Exhibit C of the Treasurer's Report showed accounts receivables totaling $317,693 and accounts payables of $222,154, leaving a net asset balance of $112,736 at the end of February. An action was requested to approve the Treasurer's report for the month of February and approve payables in the amount of $150,126.69. Motion to approve treasurer's report and payables was made by Director Pascoe and seconded by Director Fast. The motion was unanimously carried.

5. Basin Coordinator/ Planning Manager Report
    a. Budget for Calendar Year 2018 – Update – Mr. Erlewine reported that the bulk of the 2018 budget was presented at the February Board meeting, except for Tasks 4f through 4k of the SAA#4 which had not been quantified. Mr. Erlewine presented costs estimates and defined scopes of work for each of the tasks from 4f thru 4k. Kern Groundwater Authority has submitted invoices to receive money from the Stressed Counties Grant to assist with cost for work for meeting GSP requirements. Motion was made by Director Taube to approve the entire 2018 Budget and second by Director Morris. The motion was unanimously carried.

    b. Special Activities Agreement #2
        i. Cash Call or Develop a formal SAA#2 – Mr. Erlewine presented background on KGA's action in 2017 to support a cost share with Kern River GSA for GSP Groundwater Modeling. Special Activities Agreement #2 was proposed at the time, but was not developed as a formal agreement. Instead it was retained as a budget line item. Mr. Erlewine recommended that an agreement or letter be prepared that defines the cost sharing relationship between KGA and Kern River. Additionally, participation percentages need to be reviewed to provide for invoicing of KGA members for the groundwater modeling activities. Director Fast reported that Kern County Water Agency's Pioneer Project has wells in Kern River GSA and will likely be leaving the KGA GSP to be included in the Kern River GSA GSP. Mr. Erlewine will have updated percentages based on expressed participation to present on this matter at April's board meeting. A cash call and approval of agreement between KGA and Kern River GSA are both expected at the April KGA Board meeting.

    c. Special Activities Agreement #4 Update – Mr. Erlewine reported that Special Activities Agreement #4 is ready and will be going out to agencies along with an invoice for tasks 4a – 4e totaling $532,000 that was previously authorized by the KGA. Ms. Poire presented a proposal for workshop coordination and outreach events. The first two workshops have been scheduled for April 26 and May 21, with two other workshops to be scheduled in the fall of this year. Ms. Poire requested approval for budget of $20,000 for Provost & Pritchard to coordinate required outreach events. Motion was made by Director Taube to approve $20,000 Outreach Budget and was second by Director Barraza. The motion was unanimously carried.
    d. Data Request from GEI – Mr. Rodriguez of GEI reported that data has been compiled and requests have been made to KGA districts requesting assistance in obtaining missing data and reconciling some of the available data. Work is to be complete in April.
    e. DWR Agreement for use of the CV2SIM – Mr. Erlewine reported that Kern River GSA will be using DWR's Fine Grid CV2SIM Model, the availability of which has

been delayed. Originally the model was to be available for use at the end of 2017, then is was to be calibrated and available early this year. Both of those deadlines have now passed, and the model has not been made available yet. After formal written request by KGA and Kern River GSA, DWR agreed to release an early version of the CV2SIM model. Parties seeking to use the CV2SIM model before its official release will be required to sign an agreement acknowledging that the model is not in final format and data will not be shared outside of the basin. Mr. Erlewine requested approval to sign DWR's Data Release Agreement on behalf of KGA and approval to request the model on behalf of individual Districts within KGA. Motion was made by Director Unruh to approve Mr. Erlewine to sign DWR's Data Release Agreement and approve to request CV2SIM Model on behalf of Districts within KGA, motion was second by Director Pandol. The motion was unanimously carried.

f. TODD Groundwater – A workshop on the hydrogeologic conceptual model by TODD Groundwater was scheduled in Bakersfield for April 5 at the Kern River GSA Board meeting. This is a public meeting; anyone interested is welcome to sit in on this meeting. Once TODD has a chance to familiarize itself with the model and has used it for some time, the KGA will invite them to make a presentation at a future KGA meeting.
g. Policy Coordination Meeting Update – Mr. Erlewine reported that the Policy Coordination Meeting met on March 21. The Policy Coordination Group includes representatives from the GSA's that are preparing their own Groundwater Sustainability Plans, including KGA, Kern River GSA, Buena Vista, and Henry Miller. Potential additional participants include Olcese WD and the City of McFarland. Meeting topics included selecting a Plan Manager (primarily, a single point of contact for DWR), outreach, data management system, and modeling.
h. Accomplishments – Mr. Erlewine briefly summarized the accomplishments memo included in the board package.
i. Forward Work Plan – Mr. Erlewine reported that GEI will continue to work on the basin setting narrative for the umbrella GSP and KGA is continuing to coordinate with the county on stakeholders on the undistricted areas. KGA will be working on updated percentages for cost allocation for the Special Activities Agreement #2 and developing a formal or informal agreement with Kern River GSA for the modeling and peer review.

6. Update on Undistricted Northeast Area – Jim Beck, Hallmark Group, reviewed the status of efforts to organize undistricted lands in the northeast portion of the KGA, located generally north of the Kern River and east of Cawelo WD and Tulare-Kern WD. This area is roughly 153,000 acres, with about 15,000 acres currently being irrigated. Hallmark Group is working with landowners in the area to determine how they can most effectively represent themselves. An initial workshop was held and a second workshop will be held in early April. The goal is to represent their own group for GSP development. Initially, this area is organizing as a non-profit group with expected cost of

approximately $10 to $15 per acre. The first board meeting will be at the end of the month. Participants are oil producers, grazers, irrigators and residential land owners. The proposed budget of $153,000 would get them through January 2020.

7. Correspondence – Mr. Erlewine reported that a letter from Olcese Water District dated January 26, 2018 was received on March 7, 2018 providing notice of withdrawal from the KGA Joint Powers Agreement. Jeff Siemens also sent a letter resigning from the KGA Board of Directors, which was also dated January 26, 2018.

8. Attorney(s) Report
    a. Update on Legal Issues Write-up – Ms. Kincaid noted that the legal issues paper is final as of March 26 and will be distributed to KGA members. The legal issues paper is a summary of groundwater allocation precedents. A large number of attorneys participated in development of this summary, which is about 60 pages in length. Ms. Poire stated that the Legal Issues paper will be distributed to stakeholders via email. President Mullins thanked Ms. Kincaid and her team for a job well done and accepted the report on behalf of the board.
    b. Report on Grant Agreement for Prop 1 Funding - Ms. Kincaid discussed the distribution of Prop 1 funding. DWR announced its preliminary allocation of grant proceeds and is expected to finalize the recommendations soon. For the Kern Subbasin, some kind of agreement should be developed documenting fund allocation among the Kern River GSA (the applicant) and other participating GSAs, including KGA.

9. Adjournment – Director Mullins adjourned the board meeting at 9:24 a.m.

P.O. Box 81435
Bakersfield, CA 93380-1435
Administration
Telephone: 661-393-2696
Facsimile: 661-393-6884

33380 Cawelo Avenue
Bakersfield, CA 93308-9575
Water Orders and Operations
Telephone: 661-393-3361
www.northkernwsd.com

NORTH KERN WATER STORAGE DISTRICT

April 20, 2018

TO: Kern Groundwater Authority Members

FROM: Richard Diamond, General Manager

RECOMMENDED MOTION

Approve the Treasurer's Report and authorize disbursement of accounts payable as presented in **Exhibit D** in the amount of $51,094.77.

DISCUSSION

Exhibit A is the Treasurer's Report for the Authority's financial activities from March 1, 2018 through March 31, 2018. There were two separate billings to Authority Members during the month: $55,248 for SAA#1 to fund the shortfall for the ITRC project and $422,404 for SAA#4 initial Cash Call. As of March 31, 2018, no payments have been received for these billings, however, a total of $235,263.86 was received for the General Account 2018 Cash Call#1 from February 2018. After disbursement of expenses amounting to $222,153.66, the cash balance at March 31, 2018 was $30,308.28.

Exhibit B reflects the status of cash receipts and deposits from April 1 through April 19, 2018 from Cash Calls billed in February and March 2018, which totals to $85,538.81.

Exhibit C is the Aged Accounts Receivable as of March 31, 2018 reflecting a balance of $560,079.88. After applying cash receipts through April 19th as per Exhibit B, there are three members with outstanding balances from the General Account Cash Call#1 billed in February 2018 and most members have outstanding balances for the SAA#1 and SAA#4 billings in March 2018.

Exhibit D is the Accounts Payable detail as of March 31, 2018. Total payables being requested for payment approval is $51,094.77. These costs were for general KGA expenditures by GEI for meeting support ($5,371.17), O'Laughlin & Paris for legal support ($22,991.00), and Provost & Pritchard for KGA Management Services ($22,732.60).

Exhibit E is the Authority's unaudited financial statements at March 31, 2018. They include a Statement of Net Position as of March 31, 2018 and a Statement of Revenues and Expenses for the 3 months ended March 31, 2018. Both statements present the financial position and results of the Authority's activities for the general JPA membership and each specific Special Activity Agreements. Certain adjustments have been reflected to match expenses to the proper accounting period (prior year) and reclasses of amounts between cost centers in the current year. North Kern and KGA's Planning Manager continue to review expenses to determine proper classification of amounts into the correct cost centers. More adjustments and/or reclasses could be made to the financials in the future as a result of this review.

Please direct questions regarding the above to the District's General Manager, Richard Diamond (rdiamond@northkernwsd.com). You may also reach us at the District's Office, 661-393-2696.

Exhibit A
Kern Groundwater Authority
Treasurer's Report - through March 31, 2018

CURRENT ACTIVITY

Cash Balance, Prior Report (February 28, 2018)				17,198.08
Deposits	**Date**		**Amount**	
Southern San Joaquin MUD	3/5/18		18,097.22	
County of Kern	3/6/18		18,097.22	
Olcese WD	3/15/18		18,097.22	
Kern-Tulare WD	3/15/18		18,097.22	
Cawelo WD	3/15/18		18,097.22	
Shafter-Wasco ID	3/16/18		18,097.22	
Rosedale-Rio Bravo WSD	3/16/18		18,097.22	
Semitropic WSD	3/19/18		18,097.22	
Kern Water Bank Authority	3/19/18		18,097.22	
West Kern WD	3/21/18		18,097.22	
Wheeler Ridge Maricopa WSD	3/21/18		18,097.22	
North Kern WSD	3/22/18		18,097.22	
Kern County Water Agency	3/30/18		18,097.22	
Total Deposits from 2018 Cash Call #1 (General Account)				235,263.86
Disbursements	**Date**	**Ck #**		
GEI Consultants	3/22/18	1553	10,204.32	
O'Laughlin & Paris	3/22/18	1554	15,273.00	
Provost & Pritchard	3/22/18	1555	16,267.15	
Woodard & Curan	3/22/18	1556	30,282.50	
City of Bakersfield	3/30/18	1558	57,404.00	
GEI Consultants	3/30/18	1558	43,198.73	
O'Laughlin & Paris	3/30/18	1559	24,804.00	
Provost & Pritchard	3/30/18	1560	24,719.96	
				222,153.66
Cash Balance, Current Report (March 31, 2018)				30,308.28
Accounts Receivable				
See Attached "Aged AR"				560,079.88
Accounts Payable				
See A/P Detail				51,094.77
Net Assets, March 31, 2018				**539,293.39**

Exhibit B

Kern Groundwater Authority

Treasurer's Report - Deposits through April 19, 2018

Cash Call Deposits - April 1 -April 19, 2018	Dep Date	Amount		
Arvin Community Services District	4/6/18	18,097.22		
Westside District Water Authority	4/10/18	18,097.22		
Deposits from 2018 Cash Call #1 (General Account)				**36,194.44**
North Kern WSD	4/18/18	3,657.42		
Deposit from SAA#1 - funding of ITRC invoice				**3,657.42**
North Kern WSD	4/18/18	43,930.02		
Arvin Community Services District	4/19/18	1,393.93	*	
Arvin Community Services District	4/19/18	363.00	*	
Deposits from SAA#4 - Initial Cash Call				**45,686.95**
Total April Deposits (thru 4/19/18)				**85,538.81**

* Arvin Community Services District paid 100% of SAA#4 Budget in April 2018 resulting in a prepaid balance of $363.00 to be applied to future Cash Call

Exhibit C

Date: Friday, April 20, 2018
Time: 11:02AM
User: MDUAROSAN

Kern Groundwater Authority
Period Sensitive Aged AR - Historical
Period: 03-18 As of: 4/20/2018

Cust ID / Type	Ref Nbr	Customer Name / Terms	Telephone / Doc Date	Contact	Current	1 To 30	31 To 60	61 To 90	Over 90	Total
Company:	**GW**									
ACSD		Arvin Community Services Distr	(661) 854-2127	Raul Barraza Jr.						Avg Days To Pay 13
IN	2018-01	Upon Receipt	2/19/2018		0.00	0.00	18,097.22 Recd	0.00	0.00	18,097.22
IN	2018-20	Upon Receipt	4/9/2018		0.00	1,393.93 Recd	0.00	0.00	0.00	1,393.93
		Customer Total			**0.00**	**1,393.93**	**18,097.22**	**0.00**	**0.00**	**19,491.15**
ARVEDI		Arvin-Edison Water Storage Dis	(661) 854-5573							Avg Days To Pay 44
IN	2018-02	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-21	Upon Receipt	4/9/2018		0.00	54,912.52	0.00	0.00	0.00	54,912.52
IN	2018-35	Upon Receipt	4/10/2018		0.00	5,613.20	0.00	0.00	0.00	5,613.20
		Customer Total			**0.00**	**60,525.72**	**18,097.22**	**0.00**	**0.00**	**78,622.94**
BUEVIS		Buena Vista Water Storage Dist	(661) 324-1101							Avg Days To Pay 38
IN	2018-36	Upon Receipt	4/10/2018		0.00	2,292.79	0.00	0.00	0.00	2,292.79
		Customer Total			**0.00**	**2,292.79**	**0.00**	**0.00**	**0.00**	**2,292.79**
CAWWD		Cawelo Water District	(661) 393-6070							Avg Days To Pay 25
IN	2018-03	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-22	Upon Receipt	4/9/2018		0.00	25,513.20	0.00	0.00	0.00	25,513.20
IN	2018-37	Upon Receipt	4/10/2018		0.00	2,121.52	0.00	0.00	0.00	2,121.52
PA	30764		3/15/2018		0.00	0.00	-18,097.22	0.00	0.00	-18,097.22
		Customer Total			**0.00**	**27,634.72**	**0.00**	**0.00**	**0.00**	**27,634.72**
COS		City of Shafter	(661) 746-5001	Scott Hurlbert						Avg Days To Pay 42
IN	2018-19	Upon Receipt	3/23/2018		0.00	10,000.00	0.00	0.00	0.00	10,000.00
		Customer Total			**0.00**	**10,000.00**	**0.00**	**0.00**	**0.00**	**10,000.00**
COUKER		County of Kern								Avg Days To Pay 50
PA	11-342322		3/6/2018		0.00	0.00	-18,097.22	0.00	0.00	-18,097.22
IN	2018-05	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-23	Upon Receipt	4/9/2018		0.00	16,473.76	0.00	0.00	0.00	16,473.76
IN	2018-38	Upon Receipt	4/10/2018		0.00	1,138.11	0.00	0.00	0.00	1,138.11
		Customer Total			**0.00**	**17,611.87**	**0.00**	**0.00**	**0.00**	**17,611.87**
KCWA		Kern County Water Agency	(661) 634-1400							Avg Days To Pay 44
PA	113679		3/30/2018		0.00	-18,097.22	0.00	0.00	0.00	-18,097.22
IN	2018-06	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-24	Upon Receipt	4/9/2018		0.00	1,224.97	0.00	0.00	0.00	1,224.97
		Customer Total			**0.00**	**-16,872.25**	**18,097.22**	**0.00**	**0.00**	**1,224.97**
KERRIV		Kern River Groundwater Sustain	(661) 326-3767	Katharine						Avg Days To Pay 117
IN	2018-39	Upon Receipt	4/10/2018		0.00	10,430.82	0.00	0.00	0.00	10,430.82

Exhibit C

Kern Groundwater Authority

Period Sensitive Aged AR - Historical

Period: 03-18 As of: 4/20/2018

Cust ID / Type	Ref Nbr	Customer Name / Terms	Telephone / Doc Date	Contact	Current	1 To 30	31 To 60	61 To 90	Over 90	Total
		Customer Total			**0.00**	**10,430.82**	**0.00**	**0.00**	**0.00**	**10,430.82**
KERTUL		Kern Tulare Water District	(661) 327-3132						Avg Days To Pay	24
PA	11925		3/15/2018		0.00	0.00	-18,097.22	0.00	0.00	-18,097.22
IN	2018-07	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-25	Upon Receipt	4/9/2018		0.00	6,124.86	0.00	0.00	0.00	6,124.86
IN	2018-40	Upon Receipt	4/10/2018		0.00	939.22	0.00	0.00	0.00	939.22
		Customer Total			**0.00**	**7,064.08**	**0.00**	**0.00**	**0.00**	**7,064.08**
KERWAT		Kern Water Bank Authority	(661) 398-4900						Avg Days To Pay	36
PA	020643		3/19/2018		0.00	0.00	-18,097.22	0.00	0.00	-18,097.22
IN	2018-08	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-26	Upon Receipt	4/9/2018		0.00	11,235.95	0.00	0.00	0.00	11,235.95
IN	2018-41	Upon Receipt	4/10/2018		0.00	933.69	0.00	0.00	0.00	933.69
		Customer Total			**0.00**	**12,169.64**	**0.00**	**0.00**	**0.00**	**12,169.64**
NKWSD		North Kern Water Storage Distr							Avg Days To Pay	76
PA	024000		3/22/2018		0.00	-18,097.22	0.00	0.00	0.00	-18,097.22
IN	2018-09	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-27	Upon Receipt	4/9/2018		0.00	43,930.02	0.00	0.00	0.00	43,930.02
IN	2018-42	Upon Receipt	4/10/2018		0.00	3,657.42	0.00	0.00	0.00	3,657.42
		Customer Total			**0.00**	**29,490.22**	**18,097.22**	**0.00**	**0.00**	**47,587.44**
OLCWD		Olcese Water District	(661) 872-5563						Avg Days To Pay	18
PA	02227		3/15/2018		0.00	0.00	-18,097.22	0.00	0.00	-18,097.22
IN	2018-10	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-43	Upon Receipt	4/10/2018		0.00	370.16	0.00	0.00	0.00	370.16
		Customer Total			**0.00**	**370.16**	**0.00**	**0.00**	**0.00**	**370.16**
RRBWSD		Rosedale-Rio Bravo Water Stora	(661) 589-6045						Avg Days To Pay	24
PA	12393		3/16/2018		0.00	0.00	-18,097.22	0.00	0.00	-18,097.22
IN	2018-11	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-28	Upon Receipt	4/9/2018		0.00	23,781.34	0.00	0.00	0.00	23,781.34
IN	2018-44	Upon Receipt	4/10/2018		0.00	1,977.88	0.00	0.00	0.00	1,977.88
		Customer Total			**0.00**	**25,759.22**	**0.00**	**0.00**	**0.00**	**25,759.22**
SEMTRO		Semitropic Water Storage Distr	(661) 758-5113						Avg Days To Pay	37
IN	2018-12	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-29	Upon Receipt	4/9/2018		0.00	122,623.88	0.00	0.00	0.00	122,623.88
IN	2018-45	Upon Receipt	4/10/2018		0.00	10,187.73	0.00	0.00	0.00	10,187.73
PA	26423		3/19/2018		0.00	0.00	-18,097.22	0.00	0.00	-18,097.22

Exhibit C

Kern Groundwater Authority

Period Sensitive Aged AR - Historical

Period: 03-18 As of: 4/20/2018

Cust ID / Type	Ref Nbr	Customer Name / Terms	Telephone / Doc Date	Contact	Current	1 To 30	31 To 60	61 To 90	Over 90	Total
		Customer Total			**0.00**	**132,811.61**	**0.00**	**0.00**	**0.00**	**132,811.61**
SHAWAS		Shafter-Wasco Irrigation Distr	(661) 758-5153						Avg Days To Pay	34
PA	16393		3/16/2018		0.00	0.00	-18,097.22	0.00	0.00	-18,097.22
IN	2018-13	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-30	Upon Receipt	4/9/2018		0.00	21,373.64	0.00	0.00	0.00	21,373.64
IN	2018-46	Upon Receipt	4/10/2018		0.00	1,773.46	0.00	0.00	0.00	1,773.46
		Customer Total			**0.00**	**23,147.10**	**0.00**	**0.00**	**0.00**	**23,147.10**
SSJMUD		Southern San Joaquin Municipal	(661) 725-0610						Avg Days To Pay	27
IN	2018-14	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-31	Upon Receipt	4/9/2018		0.00	33,834.56	0.00	0.00	0.00	33,834.56
IN	2018-47	Upon Receipt	4/10/2018		0.00	2,812.12	0.00	0.00	0.00	2,812.12
PA	2689		3/5/2018		0.00	0.00	-18,097.22	0.00	0.00	-18,097.22
		Customer Total			**0.00**	**36,646.68**	**0.00**	**0.00**	**0.00**	**36,646.68**
TEJCAS		Tejon-Castac Water District	(661) 248-3000						Avg Days To Pay	140
IN	2017-62	Net 30 Days	11/13/2017		0.00	0.00	0.00	0.00	39.00	39.00
IN	2018-15	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-48	Upon Receipt	4/10/2018		0.00	33.15	0.00	0.00	0.00	33.15
		Customer Total			**0.00**	**33.15**	**18,097.22**	**0.00**	**39.00**	**18,169.37**
WESKER		West Kern Water District	(661) 763-3151						Avg Days To Pay	35
IN	2018-16	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-32	Upon Receipt	4/9/2018		0.00	5,871.42	0.00	0.00	0.00	5,871.42
IN	2018-49	Upon Receipt	4/10/2018		0.00	602.20	0.00	0.00	0.00	602.20
PA	42558		3/21/2018		0.00	-18,097.22	0.00	0.00	0.00	-18,097.22
		Customer Total			**0.00**	**-11,623.60**	**18,097.22**	**0.00**	**0.00**	**6,473.62**
WESSID		Westside District Water Author		c/o Greg Hammett-Belridge WSD					Avg Days To Pay	32
IN	2018-17	Upon Receipt	2/19/2018		0.00	0.00	18,097.22 Rec'd	0.00	0.00	18,097.22
IN	2018-33	Upon Receipt	4/9/2018		0.00	4,224.04	0.00	0.00	0.00	4,224.04
IN	2018-50	Upon Receipt	4/10/2018		0.00	4,060.73	0.00	0.00	0.00	4,060.73
		Customer Total			**0.00**	**8,284.77**	**18,097.22**	**0.00**	**0.00**	**26,381.99**
WHERID		Wheeler Ridge-Maricopa Water S	(661) 858-2281						Avg Days To Pay	32
PA	18124		3/21/2018		0.00	-18,097.22	0.00	0.00	0.00	-18,097.22
IN	2018-18	Upon Receipt	2/19/2018		0.00	0.00	18,097.22	0.00	0.00	18,097.22
IN	2018-34	Upon Receipt	4/9/2018		0.00	49,885.91	0.00	0.00	0.00	49,885.91
IN	2018-51	Upon Receipt	4/10/2018		0.00	6,303.80	0.00	0.00	0.00	6,303.80
		Customer Total			**0.00**	**38,092.49**	**18,097.22**	**0.00**	**0.00**	**56,189.71**

Exhibit C

Kern Groundwater Authority
Period Sensitive Aged AR - Historical
Period: 03-18 As of: 4/20/2018

Cust ID / Type / Ref Nbr / Terms	Customer Name / Doc Date	Telephone / Contact	Current	1 To 30	Days Past Due 31 To 60	61 To 90	Over 90	Total
	Statement Cycle Total		0.00	415,263.12	144,777.76	0.00	39.00	560,079.88
	Company Total		0.00	415,263.12	144,777.76	0.00	39.00	560,079.88

Exhibit D

Date: Friday, April 20, 2018
Time: 10:32AM
User: MDUAROSAN

Kern Groundwater Authority

Period Sensitive Aged AP - Detail

Period: 03-18 As of: 4/20/2018

Report: 03681d.rpt
Company: GW

Vendor Ref Nbr	Name / Inv Nbr / Master DocType/RefNbr	Doc Type	Vendor/ Doc Stat	Disc Date	Due Date	Pay Date	Days Past Due: Current	1 To 30	31 To 60	61 To 90	Over 90	Balance
Company:	**GW**											
GEICON	GEI Consultants, Inc.		A									
000093	3034611	VO	A	4/10/2018	5/10/2018	4/10/2018	5,371.17	0.00	0.00	0.00	0.00	5,371.17
	Vendor Total						**5,371.17**	**0.00**	**0.00**	**0.00**	**0.00**	**5,371.17**
OLAPAR	O'Laughlin & Paris LLP		A									
000094	8611	VO	A	3/29/2018	4/28/2018	3/29/2018	22,991.00	0.00	0.00	0.00	0.00	22,991.00
	Vendor Total						**22,991.00**	**0.00**	**0.00**	**0.00**	**0.00**	**22,991.00**
PROPRI	Provost & Pritchard Consulting		A									
000092	67018	VO	A	3/9/2018	4/8/2018	3/9/2018	0.00	22,732.60	0.00	0.00	0.00	22,732.60
	Vendor Total						**0.00**	**22,732.60**	**0.00**	**0.00**	**0.00**	**22,732.60**
	Company Total						**28,362.17**	**22,732.60**	**0.00**	**0.00**	**0.00**	**51,094.77**

GEI Consultants

PLEASE REMIT TO:
PO Box 843005
Boston, MA 02284-3005

Attention: Mr. Richard Diamond
KERN GROUNDWATER MANAGEMENT COMMITTEE
rdiamond@northkernwsd.com
PMIZE@NORTHKERNWSD.COM
3380 Cawelo Ave.
BAKERSFIELD, CA 93308
United States

Invoice: 3034611
Invoice Date: 4/10/2018
Project: 1601660
Project Name: KGA - PROJECT MGMT MEETINGS

For Professional Services Rendered For 2/25/2018 Through 3/31/2018
Your Project: TO 7 AMENDMENT 1

		Current Billings
1601660 - KGA- PROJECT MGMT MEETINGS		
2017 - 2017 PROJECT MANAGMENT AND MEETING SUPPORT		5,371.17
Multiplier Labor	5,371.17	
Current Billings		5,371.17
Amount Due This Bill		5,371.17

INVOICE APPROVAL	NAME	INITIALS	DATE
	GEN. MANAGER		4/11
	CONTROLLER		4/12/18
	ENGINEER		
	MAINTENANCE		
	OPERATIONS		
	GL#		

Total Fee:	75,000.00
To Date Billings:	61,598.17
Total Remaining:	13,401.83

Larry J. Rodriguez

Outstanding Receivables

Invoice Number	Date	Amount	Balance Due
3033561	3/9/2018	3,295.27	3,295.27
3033573	3/10/2018	4,473.92	4,473.92
			7,769.19

Project: 1601660 - KGA - PROJECT MGMT MEETINGS **Invoice: 3034611**

1 - PROFESSIONAL SERVICES AND EXPENSES

Multiplier Labor

Class / Employee	*Hours*	*Cost Rate*	*Multiplier*	*Amount*
PROJECT PROFESSIONAL-GRADE 3				
Arjun Bharadwaj	3.50	35.920	3.0500	383.45
SENIOR CONSULTANT-GRADE 8				
Larry J. Rodriguez	10.50	89.840	3.0500	2,877.12
SENIOR PROFESSIONAL-GRADE 6				
Michelle R Ricker	11.00	52.000	3.0500	1,744.60
SENIOR PROFESSIONAL-GRADE 7				
Ronald J. Eid	1.50	80.000	3.0500	366.00
Total Multiplier Labor				*5,371.17*
Total Bill Task: 1 - PROFESSIONAL SERVICES AND EXPENSES				**5,371.17**

Total Project: 1601660 - KGA - PROJECT MGMT MEETINGS **5,371.17**

NORTH KERN

MAR 27 2018

WATER STORAGE DIST.

286 W. Cromwell Avenue
Fresno, CA 93711
(559) 449-2700
Fax (559) 449-2715

PROVOST& PRITCHARD CONSULTING GROUP

Kern Groundwater Authority
Attn: Eric Averett
PO Box 20820
Bakersfield, CA 93390-0820

March 9, 2018
Project: No: 02720-17-001
Invoice No: 67018

Project Name: **Kern Groundwater Authority Management Team for the KGA**

Consultant provides management team, consisting of Basin Coordinator, Planning Manager and Administrative Assistant to Kern Groundwater Authority. Work continued in February including ongoing coordination with the KGA Advisory Committee, Executive Committee, Policy Group and Consultant Group. Other activities included preparing Coordination Committee meeting, updating KGA Budget, developing scope of work for completing GSP, coordinating with DWR and developing a special activities agreement for ongoing GSP preparation costs. The full-time Planning Manager was hired and started work on February 26.

Professional Services from February 1, 2018 to February 28, 2018

Phase:	MGMT	KGA Management Services	
Labor			**20,621.00**
Reimbursable Expenses			**2,111.60**
		Total this Phase:	**$22,732.60**
		Total this Invoice	**$22,732.60**

B/53
92

INVOICE APPROVAL	NAME	INITIALS	DATE
	R. DIAMOND		4/2
	R MIZE		3/28
	RAM V.		
	A. ROCHA		
	F. RIZO		
	GL#	[redacted]	

7450 - 100 $13,174.72
6116 - 140 $ 9,557.88

Billing Backup

Friday, March 9, 2018
1:08:32 PM

Provost & Pritchard Consulting Group Invoice 67018 Dated 3/9/2018

Phase: MGMT KGA Management Services

Reimbursable Expenses

Travel & Mileage					
AP 15262	2/21/2018	Enterprise Rent-A-Car / K. Hansen / Invoice: 16202925, 2/4/2018		61.96	
AP 15262	2/21/2018	Enterprise Rent-A-Car / K. Hansen / Invoice: 16202925, 2/4/2018		48.65	
AP 15262	2/21/2018	Enterprise Rent-A-Car / K. Hansen / Invoice: 18202925, 2/4/2018		53.61	
AP 15542	2/28/2018	Terry L. Erlewine / 2/5/18 Amtrak fare to Bakersfield / Invoice: 022818, 2/28/2018		46.00	
AP 15542	2/28/2018	Terry L. Erlewine / 2/5/18 Overnight stay in Bakersfield / Invoice: 022818, 2/28/2018		112.29	
AP 15542	2/28/2018	Terry L. Erlewine / 2/6/18 UBER ride to P&P office / Invoice: 022818, 2/28/2018		8.84	
AP 15542	2/28/2018	Terry L. Erlewine / 2/6/18 Car Rental in Bakersfield / Invoice: 022818, 2/28/2018		67.55	
AP 15542	2/28/2018	Terry L. Erlewine / 2/6/18 Gas for trip to Fair Oaks / Invoice: 022818, 2/28/2018		38.05	
AP 15542	2/28/2018	Terry L. Erlewine / 2/7/18 Parking for SGMA website / Invoice: 022818, 2/28/2018		17.25	
AP 15542	2/28/2018	Terry L. Erlewine / 2/6/18 Taxi fare for Ride to GEI / Invoice: 022818, 2/28/2018		13.80	
AP 15542	2/28/2018	Terry L. Erlewine / 2/21/18 Amtrak Fare to Bakersfield / Invoice: 022818, 2/28/2018		51.75	
AP 15542	2/28/2018	Terry L. Erlewine / 2/21/18 Uber ride to Rosedale- Rio / Invoice: 022818, 2/28/2018		15.05	
AP 15542	2/28/2016	Terry L. Erlewine / 2/21/18 Overnight Stay in Bakersfield / Invoice: 022818, 2/28/2018		158.70	
AP 15542	2/28/2018	Terry L. Erlewine / 2/22/18 Amtrak Fare to Sacramento / Invoice: 022818, 2/28/2018		51.75	
AP 15542	2/28/2018	Terry L. Erlewine / 2/27/18 Amrtrak Fare to Bakersfield / Invoice: 022818, 2/28/2018		51.75	
AP 15542	2/28/2018	Terry L. Erlewine / 2/28/18 Overnight Stay in Bakersfield / Invoice: 022818, 2/28/2018		183.22	
AP 15542	2/28/2018	Terry L. Erlewine / 2/13/18 Parking for GRA Sacramento / Invoice: 022818, 2/28/2018		6.90	
AP 15542	2/28/2018	Terry L. Erlewine / 2/15/18 Parking for DWR meeting / Invoice: 022818, 2/28/2018		11.50	
AP 15542	2/28/2018	Terry L. Erlewine / 2/28/18 Gas for Rental Car- trip to Sacto / Invoice: 022818, 2/28/2018		36.37	
AP 15542	2/28/2018	Terry L. Erlewine / 2/28/18 Car Rental for return to Sacto / Invoice: 022818, 2/28/2018		77.26	
Other Direct Reimb Expenses					
AP 15125	2/15/2018	ACWA / 2720-17-001 MGMT / Invoice: INV005114, 9/28/2017		977.50	
AP 15542	2/28/2018	Terry L. Erlewine / 2/13/18 GRA lecture registration / Invoice: 022818, 2/28/2018		21.85	
		Total Reimbursables		**2,111.60**	**2,111.60**
			Total this Phase:		**$22,732.60**
			Total this Project:		**$22,732.60**

Exhibit E

Kern Groundwater Authority
Statement of Net Position
As of March 31, 2018

Assets

Current Assets		
Cash		30,308
Accounts Receivable		560,080
Total Current Assets		590,388
Total Assets		**590,388**

Liabilities and Net Position

Current Liabilities		
Accounts Payable		51,095
Total Current Liabilities		51,095
Net Position		
KGA JPA - #100		
Current Earnings	175,061	
Net Position - Prior Year	133,853	
Prior Year Adjmt-accrual of 2017 P&P invoice	(16,267)	
Prior Year Adjmt-reclass GEI invoice to SAA 1 - #110	275	292,923
Evapotranspiration Study - SAA 1 - #110		
Current Earnings	55,248	
Net Position - Prior Year	27	
Prior Year Adjmt-accrual of 2017 ITRC invoice	(55,000)	
Prior Year Adjmt-reclass GEI invoice from General #100	(275)	0
Kern River GSA Groundwater Model - SAA 2 - #130		
Current Earnings	-	
Net Position - Prior Year	(7,735)	
Prior Year Adjmt-accrual of 2017 RMC invoice	(50,283)	(58,018)
KGA GSA - SAA 3 - #120		
Current Earnings	-	
Net Position - Prior Year	(27,318)	(27,318)
KGA GSP - SAA 4 - #140		
Current Earnings	331,706	
Net Position - Prior Year	-	331,706
Total Net Position		539,293
Total Liabilities and Net Position		**590,388**

Exhibit E

Kern Groundwater Authority
Statement of Revenues and Expenses
3 Months Ended March 31, 2018

	Current Month						Year to Date - 2018					
	KGA JPA Dept. 100	ET Study SAA #1 Dept. 110	KRGSA SAA #2 Dept. 130	KGA GSA SAA #3 Dept. 120	KGA GSP SAA #4 Dept. 140	Combined	KGA JPA Dept. 100	ET Study SAA #1 Dept. 110	KRGSA SAA #2 Dept. 130	KGA GSA SAA #3 Dept. 120	KGA GSP SAA #4 Dept. 140	Combined
Member Contributions	-	55,248	-	-	422,404	477,652	317,653	55,248	-	-	422,404	795,305
Total Revenue	-	55,248	-	-	422,404	477,652	317,653	55,248	-	-	422,404	795,305
Accounting	-	-	-	-	-	-	-	-	-	-	-	-
Engineering	5,371	-	-	-	9,558	14,929	136,632	-	50,283	-	9,558	196,472
Reclassify costs-Engineering	(77,017)	(55,275)	(50,283)	-	8,586	(173,989)	(71,267)	(0)	(50,283)	-	8,586	(112,964)
Legal	7,840	-	-	-	15,151	22,991	47,917	-	-	-	15,151	63,068
Office / Bank	-	-	-	-	-	-	-	-	-	-	-	-
Other Outside Services	13,175	-	-	-	-	13,175	13,175	-	-	82,124	-	95,299
Reclassify costs-Outside Svcs	77,160	-	-	(82,124)	57,404	52,440	16,134	-	-	(82,124)	57,404	(8,586)
Total Expenses	26,529	(55,275)	(50,283)	(82,124)	90,698	(70,455)	142,591	(0)	-	-	90,698	233,289
Change in Net Position - Current Earnings	**(26,529)**	**110,523**	**50,283**	**82,124**	**331,706**	**548,107**	**175,061**	**55,248**	**-**	**-**	**331,706**	**562,016**

Kern Groundwater Authority

Financial Statements

December 31, 2016

C O N T E N T S

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Management's Discussion and Analysis (Required Supplementary Information)	2 - 4
Financial Statements	
Statement of net position	5
Statement of revenues, expenses, and changes in net position	6
Statement of cash flows	7
Notes to financial statements	8 - 11

BARBICH HOOPER KING
DILL HOFFMAN
ACCOUNTANCY CORPORATION

Independent Auditors' Report

Board of Directors
Kern Groundwater Authority
Bakersfield, California

We have audited the accompanying financial statements of the Kern Groundwater Authority as of and for the year ended December 31, 2016 and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Kern Groundwater Authority as of December 31, 2016 and the changes in its financial position and cash flows for the year ended December 31, 2016 in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 2 through 4 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

BARBICH HOOPER KING
DILL HOFFMAN
Accountancy Corporation

Bakersfield, California
April 20, 2018

As management of the Kern Groundwater Authority ("Authority"), we offer readers of the Authority's financial statements this narrative overview and analysis of the Authority's financial performance during the year ended December 31, 2016. Please read it in conjunction with the Authority's financial statements, which follow this section.

Financial and Operating Highlights

The Authority began gathering data for compliance with SGMA (See Note 1) by engaging legal and engineering consultants, the primary tasks of which were:

- Evaluating different models for ground water sustainability agencies and plans
- Formulating a strategy for required coordination issues
- Preparation for determining data to be collected for the above processes

As of December 31, 2016 the Authority had made significant progress in accomplishing these preliminary goals.

Overview of the Financial Statements

This annual financial report includes the management's discussion and analysis, the independent auditors' report, and the basic financial statements of the Authority. The financial statements also include notes that explain in more detail some of the information in the financial statements.

Required Financial Statements

The financial statements of the Authority report information of the Authority using accounting methods similar to those used by private sector companies. These statements offer short and long-term financial information about its activities. The Statement of Net Position includes all of the Authority's assets and liabilities and provides information about the nature and amounts of investments in resources (assets) and the obligations to the Authority's creditors (liabilities). It also provides the basis for evaluating the capital structure of the Authority and assessing the liquidity and financial flexibility of the Authority.

All of the revenues and expenses for the year ended December 31, 2016 are accounted for in the Statement of Revenues, Expenses and Changes in Net Position. This statement can be used to determine whether the Authority has successfully recovered all its costs through its user fees and other charges, and to determine its profitability and its credit worthiness.

The final required financial statement is the Statement of Cash Flows. This statement reports cash receipts, cash payments, and net changes in cash resulting from operations, financing, and investing activities, and provides answers to such questions as where did cash come from, what was cash used for, and what was the change in the cash balance during the reporting period.

Financial Analysis of the Authority

One of the most important questions asked about the Authority's finances is, "Is the Authority, as a whole, better off or worse off as a result of this year's activities?" The Statement of Net Position, and the Statement of Revenues, Expenses and Change in Net Position report information about the Authority's activities in a way that will help answer this question. These two statements report the net position of the Authority and the changes in it. One can think of the Authority's net position - the

difference between assets and liabilities - as one way to measure financial health or financial position. Over time, increases and decreases in the Authority's net position is one indicator of whether its financial health is improving or deteriorating. However, other non-financial factors such as changes in economic conditions, hydrological conditions, and new or changed governmental regulation also need to be considered.

Table A presents a summary of the Authority's statement of net position.

Table A
Condensed Statement of Net Position
December 31, 2016

	2016	*2015*	*Dollar Change*	*Percentage Change*
Current assets	$ 270,703	$ 58,229	$ 212,474	364.9%
Current liabilities	$ 224,095	$ 23,836	$ 200,259	840.2%
Unrestricted	46,608	34,393	12,215	35.5%
	$ 270,703	$ 58,229	$ 212,474	364.9%

The increase in current assets of $212,474 or 364.9% at December 31, 2016 is attributable to higher cash balances arising from member assessments to fund various Authority activities during the year.

The increase in current liabilities of $200,259 or 840.2% at December 31, 2016 is due primarily to a payable related to the SSA#1 study (See Note 1).

The increase in unrestricted balance at December 31, 2016 of $12,215 or 35.5% is due to excess cash reserves over current Authority expenses.

While the Statement of Net Position shows the change in financial position of the Authority, the Statement of Revenues and Expenses and Changes in Net Position provides answers as to nature and source of these changes.

Table B presents a summary of the Authority's statement of revenues, expenses and changes in net position.

Table B
Condensed Statement of Revenues, Expenses and Changes in Net Position
For the Years ended December 31, 2016 and 2015

	2016	*2015*	*Dollar Change*	*Percentage Change*
Operating revenues	$ 360,734	$ 360,696	$ 38	0.0%
Operating expenses	348,519	326,303	22,216	6.8%
Operating income	12,215	34,393	(22,178)	(64.5%)
Change in net position	12,215	34,393	(22,178)	(64.5%)
Net position, at beginning of year	34,393	-	34,393	100.0%
Net position, at end of year	$ 46,608	$ 34,393	$ 12,215	35.5%

Budgetary Comparison

The Authority did not prepare or adopt a budget for the year under audit; therefore, a budget comparison is not presented.

Capital Assets

During the year ended December 31,2016, the Authority did not purchase or receive capital assets.

Debt Service Requirements

No debt was issued or outstanding during the year ended December 31, 2016.

Contacting the Authority's Management

This financial report is designed to provide our customers and creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the money it receives. If you have questions about this report or need additional information, contact Richard Diamond, General Manager of North Kern Water Storage District, P.O. Box 81435, Bakersfield, CA 93308.

Kern Groundwater Authority

Statement of Net Position
December 31, 2016

ASSETS		
Current Assets		
Cash and cash equivalents	$	270,703
	$	270,703
LIABILITIES AND NET POSITION		
Current Liabilities		
Accounts payable and accrued liabilities	$	224,095
Net Position		
Unrestricted		46,608
	$	270,703

See Notes to Financial Statements.

Kern Groundwater Authority

Statement of Revenues, Expenses, and Changes in Net Position
For the Year Ended December 31, 2016

Revenues:		
Assessments to members	$	360,734
Operating expenses:		
General and administrative		348,519
Operating income		12,215
Change in net position		12,215
Net position, at December 31, 2015		34,393
Net position, at December 31, 2016	$	46,608

See Notes to Financial Statements.

Kern Groundwater Authority

Statement of Cash Flows
For the Year Ended December 31, 2016

Cash flows from operating activities:		
Cash receipts from assessments	$	366,034
Cash payments to suppliers for goods and services		(148,260)
Net cash provided by operating activities		217,774
Net increase in cash and cash equivalents		217,774
Cash and cash equivalents at December 31, 2015		52,929
Cash and cash equivalents at December 31, 2016	$	270,703
Reconciliation of operating income to net cash provided by operating activities:		
Operating income	$	12,215
Changes in operating assets and liabilities:		
Accounts receivable		5,300
Accounts payable		200,259
Net cash provided by operating activities	$	217,774

See Notes to Financial Statements.

Note 1. Nature of Activities and Summary of Significant Accounting Policies

The reporting entity:

As a result of extended drought in California and diminishing surface water supplies, the State of California began proposing and developing comprehensive groundwater legislation to better manage groundwater. The California State Legislature passed and the Governor signed the "Sustainable Groundwater Management Act ("SGMA")" on September 16, 2014, which became effective January 1, 2015.

In anticipation and prior to SGMA being passed into law, a number of Kern County water districts formed a committee in January 2014 to begin the process of forming a joint powers authority to represent member water districts in the administration of duties related to SGMA. On May 27, 2014, the Kern Groundwater Authority (the "Authority") was formalized through the adoption of a Joint Powers Authority (JPA) to carry out the purposes of part 2-75 of Division 6 (commencing at section 10750 of the California Water Code) and develop, adopt, and implement a ground water management plan that would be available to those lands within the boundaries of the Authority's members and with the Tulare Lake Groundwater Basin.

The Authority initiated amendments to the existing JPA during 2016 and the original JPA was amended and restated by Board adoption on April 5, 2016. The amended and restated JPA addressed the intent that each Member has the sole right and responsibility to implement SGMA within its respective boundaries, acknowledges the formation of the Groundwater Sustainability Agency (GSA) under SGMA (Water Code 10723), and the development of the Groundwater Sustainability Plan (GSP) (Water Code 10727).

During 2016, County of Kern was awarded a grant from the Department of Water Resources under the Proposition 1 Sustainable Groundwater Planning Grant Program for counties with stressed basins. The grant was divided into two Kern County sub-basins-Indian Wells Sub-Basin and Kern County Sub-Basin. The Authority is located within the Kern County Sub-Basin and thus will receive a portion of the grant funds. As of December 31, 2016, County of Kern has received no reimbursements under the grant and correspondingly, the Authority has received no grant proceeds at year-end.

In April 2016, Special Activity Agreement #1 (SAA#1) was approved by the Authority Board of Directors and signed by numerous Members and several water districts that are not part of the Authority ("Participants"). SAA#1 provides for a contract with the Irrigation Training & Research Center (ITRC) to develop estimates of historical water use in the Kern County Sub-Basin. The costs for SAA#1 are to be funded by the Participants based on an acreage allocation agreed to between the Authority and the Participants. In connection with SAA#1, the Authority has applied for and received approval of a grant from the Department of Water Resources to reimburse a significant portion of costs associated to SAA#1. As of December 31, 2016, the Authority has received no reimbursements under the grant.

Members:

As of December 31, 2016, the Authority's Members are as follows:

Arvin-Edison Water Storage District
Cawelo Water District
City of Shafter
Improvement District No. 4 (Resigned effective April 30, 2016)
Kern County Water Agency
Kern County
Kern Delta Water District (Resigned effective July 31, 2016)
Kern-Tulare Water District
Kern Water Bank Authority
North Kern Water Storage District
Olcese Water District
Rosedale-Rio Bravo Water Storage District
Semitropic Water Storage District
Shafter-Wasco Irrigation District
Southern San Joaquin Municipal Utility District
Tejon-Castaic Water District
West Kern Water District
Westside District Water Authority
Wheeler Ridge-Maricopa Water Storage District

Management and Board of Directors:

The Authority shall be governed by a Board of Directors, which shall elect a Chairman and Vice-Chairman, whose terms shall be established by the Board of Directors from time to time as necessary. The Board of Directors composition shall be altered from time to time to reflect the termination and/or admission of any new Member. The JPA directs that voting is based on each Member having one vote on matters in which such Members are entitled to vote.

Basis of accounting and financial reporting:

The accompanying financial statements have been prepared on the accrual basis of accounting, in conformity with the uniform system of accounts prescribed for water districts by the Controller of the State of California. Revenues are recognized when earned and expenses are recognized when incurred regardless of the timing of cash payments or receipts.

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. Revenues and expenses not meeting this definition are reported as nonoperating.

When the Authority has both unrestricted and restricted resources available for Authority purposes, it is the Authority's practice to first expend restricted resources, subsequently utilizing unrestricted resources as needed.

The Authority utilizes a net position presentation in accordance with GASB Statement 34, *Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments*, as amended by GASB statement 63, *Financial Reporting of Deferred Outflows or Resources, Deferred Inflows of Resources, and Net Position*. Net position is categorized as invested in capital assets, net of related debt, restricted components of net position and unrestricted components of net position. These categories are defined as follows:

Net investment in capital - This component of net position consists of capital assets, including restricted capital assets, net of accumulated depreciation and the deferred outflow of advanced refunding of bonds, reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds are not included in the calculation of invested in capital assets, net of related debt. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.

Restricted components of net position - This component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Generally, a liability relates to restricted assets if the asset results from a resource flow that also results in the recognition of a liability or if the liability will be liquidated with the restricted assets reported.

Unrestricted components of net position - This component of net position is the net amount of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position

Fund accounting:

The Authority is accounted for as an enterprise fund. Enterprise funds are set up to account for the acquisition and operation of government facilities and services that are intended to be primarily (over 50%) self-supported by user charges. Enterprise funds are required when any one of the three criteria are met: the activity of the fund is financed by debt secured by a pledge of fee revenue, laws require collection fees adequate to recover costs, or pricing policies are established to produce fees that recover costs.

Use of estimates:

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and cash equivalents:

For purpose of reporting cash flows, the Authority considers cash equivalents to be all highly liquid debt instruments purchased with an original maturity of three months or less. At December 31, 2016, cash and cash equivalents include amounts deposited with banks.

Cash flows:

GASB Statement 9, *Reporting of Cash Flows for Proprietary and Nonexpendable Trust Funds and Governmental Entities that Use Proprietary Fund Accounting,* states for purposes of preparing the statement of cash flows, all transactions not classified as capital and related financing activities or investing activities are classified as operating activities.

Custodial credit risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the Authority will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g. broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code and the Authority's investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits, other than the following provisions for deposits: The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total deposited by the public agencies. California law also allows financial institutions to secure governmental deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits. At December 31, 2016, the Authority had no risk associated with custodial assets.

Note 2. Related Party Transactions

Assessment fees for the year ended December 31, 2016 of $360,734 resulted from a cost sharing agreement between the Members and the Authority.

BARBICH HOOPER KING
DILL HOFFMAN
ACCOUNTANCY CORPORATION

April 20, 2018

To the Board of Directors

Kern Groundwater Authority

We have audited the financial statements of Kern Groundwater Authority for the year ended December 31, 2016. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated November 1, 2017. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by Kern Groundwater Authority are described in Note 1 to the financial statements. We noted no transactions entered into by Kern Groundwater Authority for the year ended December 31, 2016 for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. There are no estimates that are significant to the financial statements as of December 31, 2016

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. No such adjustments were made as part of the audit.

P.O. BOX 11171 | BAKERSFIELD, CA 93389

5001 E. COMMERCENTER DRIVE | SUITE 350 | BAKERSFIELD, CA 93309

(661) 631-1171 OFFICE | (661) 631-0244 FAX | BHKCPAS.com

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated April 20, 2018.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to Kern Groundwater Authority's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management prior to retention as Kern Groundwater Authority's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Restriction on Use

This information is intended solely for the use of Board of Directors and management of Kern Groundwater Authority and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

BARBICH HOOPER KING
DILL HOFFMAN
Accountancy Corporation

Barbich Hooper King

Bakersfield, California
April 20, 2018

North Kern Water Storage District
Audit for the Year Ended December 31, 2016
Schedule of Corrected Misstatements

Listing of Corrected Misstatements:

		Debit	Credit
1)	Engineering Consultants	60,375	
	Accrued Payables		60,375

To accrue for expenses occuring in 2016, but paid in 2017

BARBICH HOOPER KING
DILL HOFFMAN
ACCOUNTANCY CORPORATION

April 12, 2018

Board of Directors
Kern Groundwater Authority
P.O. Box 20820
Bakersfield, CA 93390

We are pleased to confirm our understanding of the services we are to provide Kern Groundwater Authority (the Authority) for the year ended December 31, 2017. We will audit the financial statements, including the related notes to the financial statements, which collectively comprise the basic financial statements of Kern Groundwater Authority as of and for the year ended December 31, 2017. Accounting standards generally accepted in the United States of America provide for certain required supplementary information (RSI), such as management's discussion and analysis (MD&A), to supplement the Authority's basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. As part of our engagement, we will apply certain limited procedures to the Authority's RSI in accordance with auditing standards generally accepted in the United States of America. These limited procedures will consist of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We will not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance. The following RSI is required by U.S. generally accepted accounting principles and will be subjected to certain limited procedures, but will not be audited:

1) Management's Discussion and Analysis.

Audit Objective

The objective of our audit is the expression of an opinion as to whether your financial statements are fairly presented, in all material respects, in conformity with generally accepted accounting principles. Our audit will be conducted in accordance with auditing standards generally accepted in the United States of America and will include tests of the accounting records and other procedures we consider necessary to enable us to express such opinions. We will issue a written report upon completion of our audit of Kern Groundwater Authority's financial statements. Our report will be addressed to the Board of Directors of Kern Groundwater Authority. We cannot provide assurance that unmodified opinions will be expressed. Circumstances may arise in which it is necessary for us to modify our opinions or add emphasis-of-matter or other-matter paragraphs. If our opinion is other than unmodified, we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed an opinion, we may decline to express opinions or may withdraw from this engagement.

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Audit Procedures—General

An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We will plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the government or to acts by management or employees acting on behalf of the government.

Because of the inherent limitations of an audit, combined with the inherent limitations of internal control, and because we will not perform a detailed examination of all transactions, there is a risk that material misstatements may exist and not be detected by us, even though the audit is properly planned and performed in accordance with U.S. generally accepted auditing standards. In addition, an audit is not designed to detect immaterial misstatements, or violations of laws or governmental regulations that do not have a direct and material effect on the financial statements. However, we will inform the appropriate level of management of any material errors, fraudulent financial reporting, or misappropriation of assets that comes to our attention. We will also inform the appropriate level of management of any violations of laws or governmental regulations that come to our attention, unless clearly inconsequential. Our responsibility as auditors is limited to the period covered by our audit and does not extend to any later periods for which we are not engaged as auditors.

Our procedures will include tests of documentary evidence supporting the transactions recorded in the accounts, and may include direct confirmation of receivables and certain other assets and liabilities by correspondence with selected individuals, funding sources, creditors, and financial institutions. We will request written representations from your attorneys as part of the engagement, and they may bill you for responding to this inquiry. At the conclusion of our audit, we will require certain written representations from you about the financial statements and related matters.

Audit Procedures—Internal Control

Our audit will include obtaining an understanding of the government and its environment, including internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. An audit is not designed to provide assurance on internal control or to identify deficiencies in internal control. However, during the audit, we will communicate to management and those charged with governance internal control related matters that are required to be communicated under AICPA professional standards.

Audit Procedures—Compliance

As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of the Authority's compliance with the provisions of applicable laws, regulations, contracts, and agreements. However, the objective of our audit will not be to provide an opinion on overall compliance and we will not express such an opinion.

Other Services

We will also prepare the financial statements of Kern Groundwater Authority in conformity with U.S. generally accepted accounting principles based on information provided by you. We will perform the services in accordance with applicable professional standards. The other services are limited to the financial statement services previously defined. We, in our sole professional judgment, reserve the right

to refuse to perform any procedure or take any action that could be construed as assuming management responsibilities.

Management Responsibilities

Management is responsible for designing, implementing, and maintaining effective internal controls, including monitoring ongoing activities; for the selection and application of accounting principles; and for the preparation and fair presentation of the financial statements in conformity with U.S. generally accepted accounting principles.

Management is also responsible for making all financial records and related information available to us and for the accuracy and completeness of that information. You are also responsible for providing us with (1) access to all information of which you are aware that is relevant to the preparation and fair presentation of the financial statements, (2) additional information that we may request for the purpose of the audit, and (3) unrestricted access to persons within the government from whom we determine it necessary to obtain audit evidence.

Your responsibilities include adjusting the financial statements to correct material misstatements and confirming to us in the management representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

You are responsible for the design and implementation of programs and controls to prevent and detect fraud, and for informing us about all known or suspected fraud affecting the government involving (1) management, (2) employees who have significant roles in internal control, and (3) others where the fraud could have a material effect on the financial statements. Your responsibilities include informing us of your knowledge of any allegations of fraud or suspected fraud affecting the government received in communications from employees, former employees, regulators, or others. In addition, you are responsible for identifying and ensuring that the government complies with applicable laws and regulations.

You agree to assume all management responsibilities for financial statement preparation services and any other nonattest services we provide; oversee the services by designating an individual, preferably from senior management, with suitable skill, knowledge, or experience; evaluate the adequacy and results of the services; and accept responsibility for them.

Engagement Administration, Fees, and Other

We may from time to time and depending on the circumstances, use third-party service providers in serving your account. We may share confidential information about you with these service providers, but remain committed to maintaining the confidentiality and security of your information. Accordingly, we maintain internal policies, procedures, and safeguards to protect the confidentiality of your personal information. In addition, we will secure confidentiality agreements with all service providers to maintain the confidentiality of your information and we will take reasonable precautions to determine that they have appropriate procedures in place to prevent the unauthorized release of your confidential information to others. In the event that we are unable to secure an appropriate confidentiality agreement, you will be asked to provide your consent prior to the sharing of your confidential information with the third-party service provider. Furthermore, we will remain responsible for the work provided by any such third-party service providers.

We understand that your employees will prepare all cash, accounts receivable, or other confirmations we request and will locate any documents selected by us for testing.

Geoff King is the engagement partner and is responsible for supervising the engagement and signing the report or authorizing another individual to sign it.

Our fee for these services will be at our standard hourly rates plus out-of-pocket costs (such as report reproduction, word processing, postage, travel, copies, telephone, etc.) except that we agree that our gross fee, including expenses approximate $4,500 - $6,000. The above fee is based on anticipated cooperation from your personnel and the assumption that unexpected circumstances will not be encountered during the audit. If significant additional time is necessary, we will discuss it with you and arrive at a new fee estimate before we incur the additional costs.

We appreciate the opportunity to be of service to Kern Groundwater Authority and believe this letter accurately summarizes the significant terms of our engagement. If you have any questions, please let us know. If you agree with the terms of our engagement as described in this letter, please sign the enclosed copy and return it to us.

Very truly yours,

Barbich Hooper King Dill Hoffman

Accountancy Corporation

By: Geoffrey B. King, CPA

RESPONSE:

This letter correctly sets forth the understanding of **Kern Groundwater Authority**:

Signature: _____

Title: _____

Date: _____

KERN RIVER GSA

May 3, 2018

Rodney J. Palla, Chair
Bob Smith
Gene Lundquist

Dennis Mullins, President
Kern Groundwater Authority
1800 30th Street
Suite 280
Bakersfield, CA 93301

Re: Reimbursement Agreement

Dear Mr. Mullins:

The Kern River Groundwater Sustainability Agency (Kern River GSA) retained Todd Groundwater to update the Department of Water Resources' C2VSim Model and, using such updated Model, to provide a current and historical water budget for the entire Kern County Sub-basin (Model Update Project). The Model Update Project is more particularly described in the attached "draft proposal" dated January 17, 2017 (**Attachment 1**). The Kern Groundwater Authority (KGA) agreed to participate in the Model Update Project and share costs with Kern River GSA based on acreage. Therefore, the Kern River GSA and KGA agree on the following terms and conditions:

1. Each participant signing below will pay its share of the initial proposed budget of approximately $432,000 per the attached table (**Attachment 2**) for the Model Update Project.
2. All payments shall be due 45 days after receipt of an invoice from the City of Bakersfield (acting as fiscal agent for the Kern River GSA).
3. It is understood that the proposed budget is an estimate only. If costs for the Model Update Project increase more than ten (10) percent over the proposed budget, the increase must be approved by KGA. Costs above the initial proposed budget will be paid in the same percentages in the attached table, unless otherwise agreed.
4. Costs will be reconciled at the end of the Model Update Project and refunds or additional payments will be due 45 days after the final accounting.

If the above terms and conditions are acceptable, please sign and date all copies of this reimbursement agreement and return them to the Kern River GSA. A fully executed original will be returned to the KGA.

Sincerely,

Rodney Palla
Chairman

Accepted:

Kern Groundwater Authority

By:_____

Title:_____

Date:_____

TODD GROUNDWATER

January 17, 2017

DRAFT PROPOSAL

To: Kern River Groundwater Sustainability Agency

From: Phyllis Stanin, PG, CHG, Vice President / Principal Geologist
Mike Maley, PG, CHG, Senior Hydrogeologist / Groundwater Modeler

Re: Update to Scope of Work dated May 9, 2016
Kern County Subbasin-Wide Water Budget Modeling with C2VSim
Groundwater Sustainability Plan (GSP)
Kern River Groundwater Sustainability Agency (KRGSA)

As outlined in the Scope of Work dated May 9, 2016, Todd Groundwater is preparing a Groundwater Sustainability Plan (GSP) for the Kern River Groundwater Sustainability Agency (GSA). In compliance with GSP regulations, Todd Groundwater proposed an approach for developing a current and historical water budget analysis using a regional groundwater model developed by the Department of Water Resources (DWR), referred to as C2VSim[1]. That approach focused on revising the C2VSim model with local KRGSA data only; this proposal expands the original approach to improve the model throughout the Kern County Subbasin and, to that extent, is intended to modify and update the previous Scope of Work.

GSP regulations require that the water budget analysis be conducted on a basin-wide basis, requiring the model to be applied over the entire 3,000 square miles of the Kern County Groundwater Subbasin[2] (5-22.14). In addition to the detailed analysis of local water budgets previously proposed for the KRGSA, GSP regulations also require *one water budget for the entire subbasin*. Recent developments suggest that the updated C2VSim model may contain local inaccuracies throughout the subbasin. This scope of work addresses revisions to the C2VSim model to address these inaccuracies.

Key inaccuracies are: (1) DWR has indicated that detailed banking recharge and recovery data have not been adequately included in the current C2VSim update; (2) recent remote sensing analyses in the Kern County Subbasin have produced revised evapotranspiration data and

[1] C2VSim refers to the California Central Valley Simulation Model developed by DWR using their modeling code Integrated Water Flow Model (IWFM). C2VSim is a regional model covering the entire California Central Valley and is being updated by DWR for application to GSP water budget analyses.
[2] GSP regulations define "Basin" as a groundwater basin or subbasin identified and defined in Bulletin 118 or as modified pursuant to Water Code 10722 et seq. For this proposal, "subbasin" is used to refer specifically to the Kern County Subbasin as defined by DWR. However, "basin", as used in GSP regulations, may also be applied to the Kern County Subbasin for the purposes of this proposal.

new crop coefficients over the past 20 years; and (3) it is recognized that local water budget data may not be adequately captured in the regional model. Todd Groundwater is recommending subbasin-wide revisions to the C2VSim model to make the model more accurate with respect to these three key items and to comply more closely with requirements for a coordinated subbasin-wide water budget analysis. This proposal contains a scope of services, schedule, and budget for expanding model revisions across the subbasin.

To develop a subbasin-wide model update of C2VSim, Todd Groundwater anticipates requesting data from other local agencies to provide water budget input data for their jurisdiction to compare to data in the model. The requested data are anticipated to include managed water supply data (e.g., surface water deliveries, land use, irrigation demand, return flows, and groundwater banking) and other relevant input data for inclusion in the revised C2VSim model for improvement of model calibration in the Kern County Subbasin. If data are provided by others using a technically-defensible methodology (suggested formats/templates to be provided), the input data would be uploaded into C2VSim by Todd Groundwater. In this manner, the revised model and water budget analysis (for current and historical water budgets) would best fulfill the GSP requirement for a coordinated water budget analysis and would produce a more accurate analysis for the benefit of all in the subbasin.

This scope of services does not include data analysis by Todd Groundwater of local water budget source data to develop the input water budget files; we assume that others would employ their own hydrogeologic consultants to develop the revised input data in a technically-credible manner. Our scope does include some local coordination for the transfer of input data, but only to the extent needed to understand the input files being provided and to ensure that the provided input data are being accurately represented in the revised C2VSim model.

In addition, our approach does not include the production of local water budgets for other GSAs. The scope of work does not include the analysis or demonstration of subsurface inflows and outflows among any of the districts or GSAs. Local analysis of water budgets for the KRGSA will be conducted as provided in our previous scope of work. The deliverable of this modeling approach is a current and historical water budget for the entire Kern County Subbasin.

We think that this approach represents the best methodology for developing the most accurate current and historical basin-wide water budget that considers GSP requirements and deadlines. Additional discussion of the approach, a scope of services, and proposed schedule and budget are included in subsequent sections of this memorandum.

APPROACH TO THE C2VSIM MODEL REVISIONS AND WATER BUDGET MODELING

The key objective of this scope of work is to develop current and historical subbasin-wide water budgets to meet GSP requirements.[3] Our general approach is to use the C2VSim model as a comprehensive framework to provide consistent water budgets on a subbasin-wide basis.

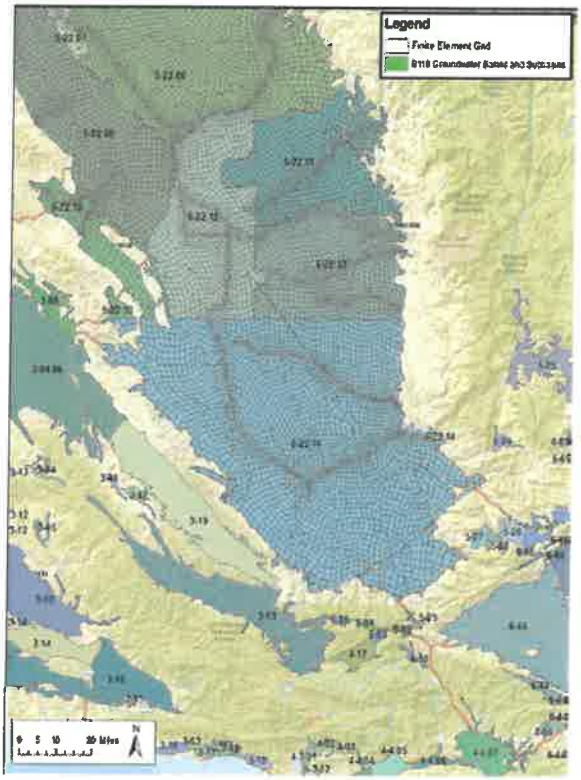


Figure 1: DWR's new version of C2VSim will have higher grid resolution in Kern County

As a regional model, the updated C2VSim may over-generalize local conditions within the Kern County Subbasin. As a result, C2VSim results may not be consistent with local site-specific data and knowledge. To address this deficiency, we propose certain checks and revisions on the managed water supply input data (e.g., surface water deliveries, land use, irrigation demand, return flows, and groundwater banking) in C2VSim. We also propose allowing other GSAs to develop their own water budget input files (using their local consultants or resources) and input these revised data to improve model accuracy on a local basis. In addition, we also propose checking and revising groundwater banking data for the large Kern Fan banking projects. Finally, we propose incorporating the recently-developed crop coefficients from the remote sensing data (being supported by the KRGSA and others). The revised C2VSim will reflect corrected local data (to the extent provided by others) and the revised model will be used to develop current and historical water budgets over the entire Kern County Subbasin. The following summarizes key aspects of our approach.

Selection and Application of the C2VSim Model

C2VSim is a regional model of the California Central Valley developed by DWR using its modeling code IWFM. IWFM is an integrated model that simulates groundwater, the unsaturated zone, and surface water flows. Given DWR's emphasis on water management,

[3] GSP regulations require current, historical, and projected water budgets. This scope of work includes current and historical water budgets only. Projected water budgets require analysis of individual projects conducted by each GSA to achieve the GSA-specific measurable objectives toward sustainability. A projected water budget analysis for the KRGSA will be conducted as described in our previous scope of work and is not reproduced herein.

C2VSim provides a strong representation of surface water and groundwater water budget components that makes it a preferred platform for determining water budgets. C2VSim is anticipated to be DWR's primary tool for evaluating water management in the Central Valley and is specifically referenced in the GSP regulations for application to GSP water budgets (§354.18(f)); therefore, utilizing C2VSim is advantageous for GSP compliance.

DWR is in the process of updating C2VSim through September 2015 to support SGMA compliance for the critically-overdrafted basins in the Central Valley. We will revise the updated C2VSim (with simulations through September 2015) to develop a current and historical water budget for the Kern County Subbasin. The updated C2VSim is expected to be released by DWR in June 2017; however, input files for the updated model can be accessed prior to the final model release. Given the GSP deadline, these files need to be obtained and reviewed as soon as possible upon notice-to-proceed.

The updated C2VSim consists of a coarse-grained and a fine-grained version referred to as C2VSim-CG and C2VSim-FG, respectively. The C2VSim-CG uses the mesh used in the previous C2VSim version with data through 2009. Because the average element size of C2VSim-CG is over 14 square miles, C2VSim-FG is also being developed by DWR to provide the data resolution to better support SGMA (Figure 1). The C2VSim-FG will have an average element size of 0.6 square miles. Both versions of the updated C2VSim will include the following hydrostratigraphic layers:

- Shallow, unconfined aquifer
- Regional confining layers
- Active confined aquifer (contains high level of pumping)
- Inactive confined aquifer (contains limited pumping), and
- Saline confined aquifer.

This scope of work does not include changes to the hydrogeological conceptual model or natural water budget components (such as precipitation, soil properties, or streamflow) of C2VSim. Specifically, the architecture of the model including layering, discretization, boundary conditions, and aquifer properties will not be revised. After the various hydrogeologic conceptual models have been developed as part of the numerous GSPs in the subbasin, there may be technical justifications for such changes to the C2VSim or other regional model for future applications. However, these modifications can be considered for future SGMA compliance after the initial GSPs containing the current and historical water budgets have been submitted.

Consistency of Modeling with GSP Regulations

The Kern County Subbasin water budget will follow GSP regulations by providing an accounting of the volume of groundwater and surface water entering and leaving the subbasin and the change in the volume of water stored. Information will be reported in tabular and graphical form as required by the regulations. Specifically, DWR requires that GSP water budgets quantify the following:

- Total surface water entering and leaving a basin by water source type.
- Inflow to the groundwater system by water source type, including subsurface groundwater inflow and infiltration of precipitation, applied water, and surface water systems, such as lakes, streams, rivers, canals, springs and conveyance systems.
- Outflows from the groundwater system by water use sector, including evapotranspiration, groundwater extraction, groundwater discharge to surface water sources, and subsurface groundwater outflow.
- The change in the annual volume of groundwater in storage between seasonal high conditions.
- The amount of overdraft over a period of years during which water year and water supply conditions approximate average conditions (if overdraft conditions occur as defined in Bulletin 118).
- The water year type associated with the annual supply, demand, and change in groundwater stored.
- An estimate of sustainable yield for the basin.

Selection of Time Periods for Water Budgets and Model Revisions

The updated C2VSim model will be capable of simulating a long-term base period (some data back to the 1920s and more detailed data back to the 1970s). However, to adhere to the expedited schedule and to provide a reasonable budget that also meets GSP requirements, we propose that model revisions be limited to relatively recent and specific time periods when data are more accurate and more readily available.

For the current water budget, GSP regulations require that the analysis be conducted for the most recent water year[4] (WY) available; for the DWR-updated C2VSim model, this is reported to be WY 2015. For the historical water budget, it is desirable to define a base period when natural hydrology represents average conditions. Regulations require that this time period cover at least 10 years. For this project, a 20-year base period from WY 1995 through WY 2014 is proposed. This 20-year period is associated with average conditions of precipitation and Kern River flows (represented as 100% Annual Index on the Kern River). This period also begins at the end of a dry period with relatively stable water levels. Additional documentation for the historical time period was provided to the Kern Groundwater Authority (KGA) on November 7, 2016 and included a number of hydrographs illustrating water level conditions over the 20-year time period.

The 20-year time period is also advantageous for incorporation of newly-available data. It is our understanding that the KGA has commissioned a remote sensing study of evapotranspiration (ET) across the entire subbasin that will provide basin-wide values for agricultural demand corresponding to the WY 1995 through WY 2014 base period. We will use these data, as available, to check against agricultural demands already incorporated into

[4] Water Year is from October through September. For example, Water Year 1995 is from October 1, 1994 through September 30, 1995.

the most recent time period of the C2VSim model. Adjustments will be made to the model to represent the newly-available data. These regional model revisions will be improved if other GSAs coordinate by providing local water budget input data. We will ensure an overall mass balance is considered in the zone budget revisions.

In our preliminary discussions with the C2VSim developers at DWR, a significant portion of model uncertainty is related to incomplete data regarding groundwater banking and other managed recharge operations in the Kern County Subbasin. Recognizing that several of the large groundwater banking projects (especially those on the Kern Fan) pre-date the 20-year base period, we propose checking/revising data for groundwater banking operations dating back to at least 1978, the beginning of banking at the City of Bakersfield 2800 Recharge Facilities. For the Kern Fan banking projects, we will check data for the Kern Water Bank, Berrenda Mesa, Pioneer Project, and the City of Bakersfield 2800 Recharge Facilities, and verify these input data with the local banking authorities. For other district-specific groundwater banking projects, we will rely on those districts to provide corrected data if model revisions are necessary.

For these proposed time periods, monthly input data will be required. For example, for surface water deliveries, monthly volumes (and locations) will be required from WY 1995 through WY 2015.

Revise C2VSim for Crop Coefficients, Groundwater Banking, and Local Water Budgets,

Our approach for revising the DWR-updated C2VSim model includes:

- newly-acquired crop coefficient data from remote sensing studies
- historical amounts of groundwater banking, and
- monthly local water budget data if provided by other GSAs and/or water districts.

We assume that remote sensing data will be provided to us by the KRGSA, who can access these data being developed by the KGA. We assume that groundwater banking data can be verified and/or revised through coordination with the local banking authorities. Local water budget inputs will be revised if local GSAs/water districts provide monthly input data for their service areas.

We will work through the KRGSA on how best to coordinate with others to acquire the input data in formats easily incorporated into the C2VSim model. A key feature of IWFM is DWR's agricultural and urban water supply and demand management module that dynamically simulates both surface water and groundwater supplies based on demand estimates, as affected by usage and climatic conditions. Todd Groundwater will consider the function of this module and provide a desired template to be used when obtaining input data from others. We will coordinate with others to ensure our understanding and accurate representation of input data into the model.

Coordinate with DWR

We will coordinate with DWR to work out methods to revise C2VSim in a manner consistent with DWR practices and to facilitate a data transfer to support DWR after the development of C2VSim with revised Kern County Subbasin data. Our scope includes time for coordination and meetings for these discussions. We will use DWR for technical support as needed, but the scope of work herein will be conducted by Todd Groundwater.

DWR's current plan is that C2VSim-CG and C2VSim-FG will use the same water budget information, but C2VSim-FG will provide a more detailed spatial distribution of the data, especially in land use and crop type information. In our preliminary discussions with DWR, C2VSim-CG is currently planned to be released in June 2017, but that C2VSim-FG does not have a projected completion date. Therefore, we will use C2VSim-CG for developing the water budgets if C2VSim-FG is not available.

Proposed Scope of Services

Our proposed scope of services incorporates our approach concepts discussed above. It is organized around the plan contents in Article 5 of the GSP draft regulations, with due consideration of other articles.

Task 1: Initial Review of C2VSim

To expedite the development of the Kern County Subbasin water budgets, we will review currently available versions of C2VSim. An update of C2VSim through September 2015 is currently being developed by DWR with an anticipated release date in mid-2017. To begin our assessment in preparation of developing water budgets, we will obtain a beta version of the C2VSim from DWR. We will then review the input data requirements and results for the Kern County Subbasin to build a foundation for using C2VSim. This effort sets the stage for the C2VSim revision in Task 3. The subtasks for Task 1 are described below.

1.1 – Coordinate with DWR on C2VSim

To facilitate working with C2VSim, we will open a channel with the DWR C2VSim developers to help facilitate our work. Early in the project, we will set up a meeting with appropriate DWR staff responsible for developing the C2VSim model to discuss the data used for Kern County. We will continue to coordinate with DWR over the life of the project, as needed, to help resolve C2VSim and Kern County Subbasin-related issues.

1.2 – Assess Kern County Water Budget Data Requirements

The C2VSim input data for the Kern County Subbasin will be reviewed, focusing on the managed water supply information. This step will build our working understanding of the model. We will compile a list of the key managed water supply data already included in C2VSim. This list can be compared to any data provided by local agencies to identify missing or incomplete water budget components in the current version of C2VSim.

1.3 – Initial Assessment of C2VSim Results in Kern County

The C2VSim results will be reviewed for the Kern County Subbasin to assess the quality of the model simulations. The results of this review will be incorporated into a Model Development Plan that will guide efforts for Task 3. The purpose of this plan is to help resolve issues concerning key parameters and assumptions early so that these will not manifest themselves later in the process. These will be documented in the Technical Report (Task 5).

Task 2: Coordinate with Local Agencies on Water Budget Input Data

As discussed previously, local water budgets will be coordinated with other GSAs/water districts to verify the accuracy and, if warranted, to revise the input data. We emphasize that we are not proposing to develop local water budgets for others; the output from the model will be a current and historical water budget for the entire subbasin. We have not included costs to analyze source data or develop the water budget components for areas outside of the KRGSA. We propose only to revise the model with the best available information on local water budgets. The following outlines the subtasks for Task 2.

2.1 Develop Local Agency Data Request

We will develop a data request to provide guidance to local agencies regarding the types of water budget input data needed for the C2VSim revision. The data request will focus on managed water supply information, but will also include the current understanding of overall water budgets for comparison to the C2VSim results.

2.2 Coordinate with Local Agencies on Water Budgets

After the data request has been submitted to the local agencies, Todd Groundwater will be available to answer questions and facilitate provision of the input data. Time is included for two trips to Kern County to meet with others, as needed, to better understand the input data being provided and to accurately represent the same in the revised model.

2.3 Compile and Review Local Agency Water Budget Data

We will compile water budget input data provided by others for comparison to the model. The water budget data will focus on managed water supply information for the C2VSim revision. For example, determination of groundwater irrigation demand can be calculated from estimates of applied water and return flows using crop maps, and then subtracting surface water irrigation supplies. Urban groundwater pumping and groundwater banking recovery amounts are measured directly and provide a more accurate dataset to compare to model estimates.

2.4 Identify Data Gaps

The results of this compilation will be summarized using tables that put the water budget components into a consistent format to illustrate the potential range and identify potential data gaps. An assessment of these data will be performed to determine the overall strengths and weaknesses of the different data sources. A proposed water budget for the GSP will be developed that utilizes the highest quality data and is consistent with the conceptual understanding of water management in the subbasin.

2.5 Water Budget Workshop

A workshop meeting is planned to present the overall approach for developing the Kern County Subbasin water budgets to the KRGSA (and others), and to discuss issues and concerns about the process. Feedback from the group will be used to improve and refine the water budgets.

Task 3: Revise C2VSim with New Data

Task 3 includes revising C2VSim with the managed water supply information from others. Because the IWFM code is primarily a text-based input data structure, time is included for developing a systematic method for revising input data, outputting results, and providing data quality reviews throughout the process. Task 3 is dependent upon DWR officially releasing the new version of C2VSim through 2015. For scheduling purposes, we assume that the new version of C2VSim will be available by June 2017 and that input files are available in early 2017. The following outlines the subtasks for Task 3.

3.1 Verify C2VSim Data and Calibration in Kern County Subbasin

Once the officially released version of C2VSim through 2015 is released by DWR, we will acquire the model and verify the results for the Kern County Subbasin. We will review the model documentation to evaluate whether there are any changes in the input data for the Kern County Subbasin compared to the beta versions used in Task 1.

3.2 Prepare Revised Data for C2VSim Input

The data received from others will be formatted into the data file structure required for C2VSim. Areas with little to no new information will default to original data contained in C2VSim. Because input data for IWFM is in large text files, a systematic method for revising input data and providing data quality reviews will be applied throughout the process.

3.3 Apply Revised C2VSim for Kern County Subbasin

After revisions are complete, the C2VSim will be setup and run. Ongoing quality review will verify that the model is properly applying the new data. A sensitivity evaluation will be run for a limited number of key parameters to evaluate the effects of varying parameters in the Kern County Subbasin on model results. The results of the model runs will be processed and tabulated.

3.4 Evaluate Revised C2VSim Performance

The results will be assessed to evaluate the effects of the new data on the overall model calibration. The results will be compiled and documented for the Technical Report. We will continue to coordinate with DWR during the C2VSim model revision process for the Kern County Subbasin. Recommendations on how to improve the C2VSim model will be presented to DWR so that future model revisions can take advantage of the local knowledge developed for the GSPs and provide an improved tool for assessing water budgets in the future.

3.5 C2VSim Revision Project Updates

Two project update meetings are planned to present the overall approach and results of the C2VSim revision to the KRGSA (and others), and to discuss issues and concerns about the process. Feedback from the group will be used to improve and refine the model.

Task 4: Generate Current and Historical Water Budgets for the Kern County Subbasin

After the C2VSim model is revised with Kern County Subbasin managed water supply data and the results are verified, we will generate subbasin-wide water budgets for the Kern County Subbasin. Water budget data will include the change in the volume of water stored, and the information will be reported in tabular and graphical form as required by SGMA. The following outlines the subtasks for Task 4.

4.1 Generate Initial Subbasin Water Budgets from Revised C2VSim

We will use the IWFM Z-Budget feature to develop the subbasin water budgets from the revised C2VSim. The water budgets will quantify the required elements required for SGMA including simulation results for subsurface inflows and outflows, managed aquifer recharge and irrigation pumping and return flows.

4.2 Public Review of Subbasin Water Budgets

After initial review and comment by the KRGSA, the results of the Kern County Subbasin water budgets from Task 4.1 will be reviewed in a public workshop. We will address comments on the water budgets and work to reconcile any questions on the results. We will compile a list of recommended changes for consideration of the final Kern County Subbasin water budgets.

4.3 Generate Final Subbasin Water Budgets from C2VSim

Final Kern County Subbasin water budgets will be generated using an agreed upon list of recommended changes. Final subbasin water budgets will include the change in the volume of water stored, and the information will be reported in tabular and graphical form as required by SGMA. Results will be documented in the Technical Report to provide the technical basis for the subbasin water budgets to support the Kern County Subbasin GSPs.

4.4 Kern County Subbasin Water Budget Workshop

The results of the initial C2VSim water budgets will be presented to KRGSA (and others) during a public workshop.

Task 5: Technical Report

A technical report will be developed that documents the work performed for this scope of work. The technical report will provide the technical basis for developing the KRGSA and subbasin-wide water budgets and revising C2VSim. The modeling results and water budgets produced for the Technical Report will be consistent with DWR's SGMA guidelines and BMPs. The following subtasks are included in Task 5.

5.1 Draft Report

For costing purposes, we assume that the draft technical report will require two draft versions. An Administrative Draft Technical Report will be prepared for KRGSA review and comments. Comments will be incorporated into a Draft Technical Report. Electronic submittal is assumed for both versions.

5.2 Final Report

The Final Technical Report will address final comments and will be included as an appendix in the KRGSA GSP. As directed by the KRGSA, the report will also be submitted to entities providing cost reimbursement. For costing purposes, we assume FedEx delivery of 10 hard copies plus an electronic version for the Final Technical Report covering the current and historical water budgets.

Task 6: Project Coordination and Communication

This task covers project coordination with the client throughout the project. Coordination will include project planning, on-going communications and project status updates. We assume that communication during the project will be conducted via emails, telephone and web meetings.

KEY ASSUMPTIONS FOR COMPLETING SCOPE OF WORK

Based on our experience, this is an aggressive, but realistic schedule for completing the scope of work contingent upon cooperation of the KRGSA and other agencies in the Kern County Subbasin in working through potential issues related to the water budgets. In order to adhere to the budget and schedule, our key assumptions are as follows:

- The official release of the updated C2VSim by DWR with simulation results through September 2015 occurs by late summer 2017. We will request beta versions of the model for initial work; however, the water budgets will need to be based on the official version. Any delays by DWR in releasing this model may impact the schedule.
- C2VSim is developed using the IWFM modeling code, which uses a text-based input data structure; therefore, time is included for developing a systematic method for revising input data, outputting results, and providing data quality reviews for working with this type of data structure.
- We will coordinate with agencies, as appropriate, to understand data provided and to check data for reasonableness, as well as QC data entry into the model. Nonetheless, we cannot be responsible for errors or omissions provided by others in either the local water budget data, source data, or methodologies employed by others to develop the water budget data.
- This scope of work focuses on historical and current water budgets for the Kern County Subbasin. Projected water budgets, which are also required by the GSP regulations, are not included in this scope of work.
- This scope of work addresses only changes related to the managed water supply components of C2VSim, and does not include changes to the hydrogeological

conceptual model or natural water budget components. We assume that no alterations will be made to the C2VSim including architecture, layering, or grid spacing.

- The scope of work does not include hydrogeologic consulting required to develop local water budgets for other local agencies; rather, we assume that the water budget input data will be provided by qualified professionals working separately under the direction of the local agencies.
- C2VSim input data for areas where local agencies provide little to no additional information, or data that cannot be readily incorporated into the model, will default to data already contained in C2VSim.

COST ESTIMATE

A cost estimate is provided at the end of this text on **Table 1**. Our budget for the groundwater assessment including Tasks 1 through 7 is estimated to total $431,957 as summarized on Table 1. Costs include labor, fees, and expenses for each project task.

The largest level of effort is assigned to Task 3 to revise the existing C2VSim with Kern County Subbasin managed water data. A relatively large level of effort is also assigned to Tasks 2 and 4 for development of subbasin wide water budgets and coordination with local agencies. This is likely to be one of the first GSPs to be prepared in the State, which introduces some uncertainty for the cost estimate. Nonetheless, we think that the scope and costs have been developed with a good understanding of the recently-adopted regulations.

This budget modifies our previous budget for developing a GSP for the KRGSA as follows.

Total Estimated GSP Budgets

Scope of Work	Estimated Budget
Previous Cost Estimate dated May 9, 2016 (as modified July 16, 2016 in Exhibit A of KRGSA 16-002)	$359,964
Cost Estimate from Table 1 herein (January 17, 2017)	$431,957
Total GSP Budgets	**$791,921**

SCHEDULE

Assuming approval of this project, we can complete the proposed scope of work in about nineteen months from the notice to proceed. The Todd Groundwater Team stands ready to start upon notice-to-proceed in February 2017; if approved in February 2017, and the DWR updated C2VSim model is available in July 2017, we should be able to complete the project by September 2018. Our proposed schedule is provided by task and subtask in **Table 2**. Proposed Project Updates and Workshop meetings are shown as diamonds.

Table 1: Cost Estimate

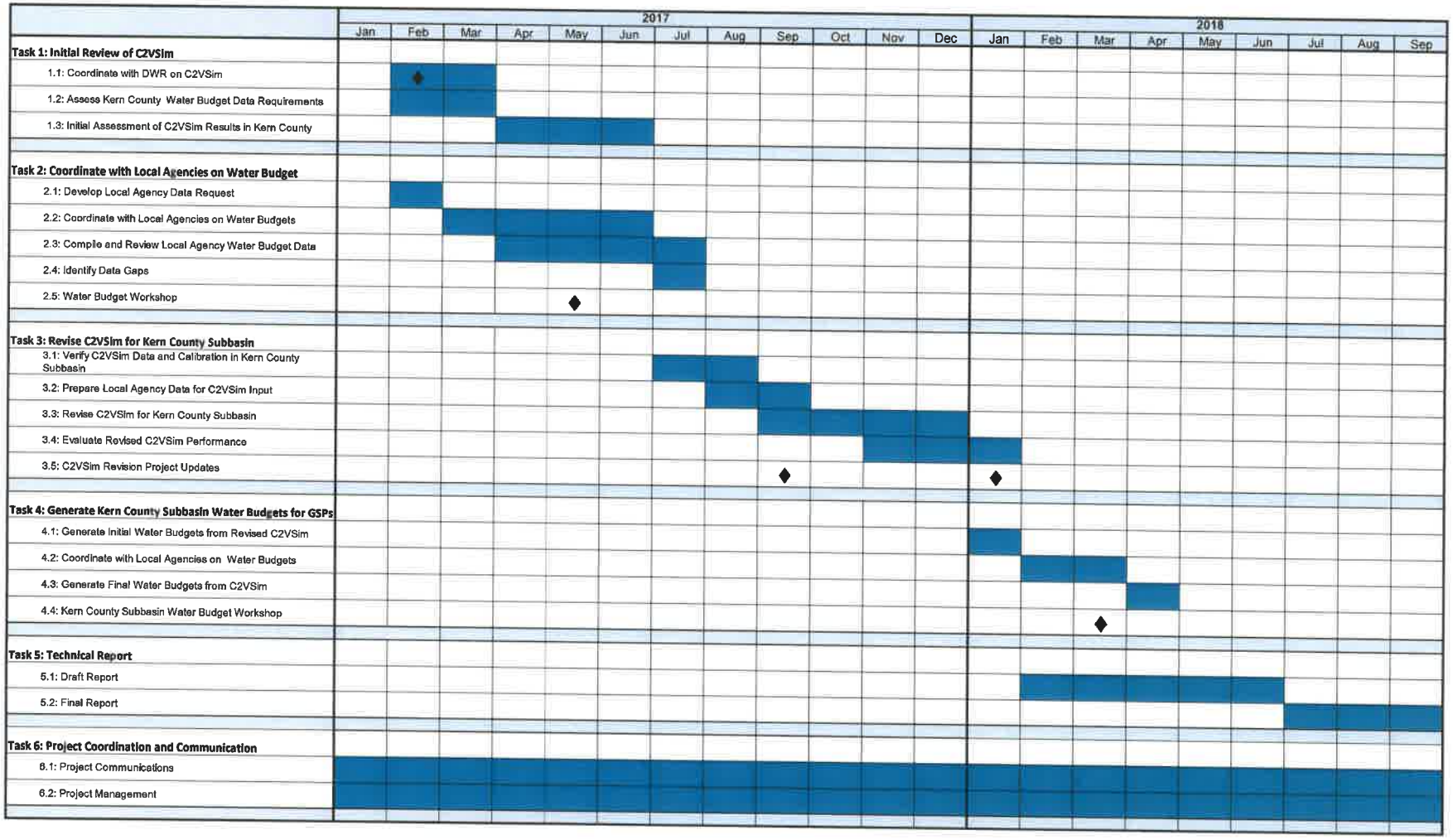
Todd Groundwater

Job Name: Revise C2VSim Model for Kern County Subbasin Water Budgets
Job Description: Revise DWR's C2VSim Model to Incorporate Improvde Information in the Kern County Subbasin for the KRGSA GSP
Client: Kern River Groundwater Sustainability Agency (KRGSA)
Date: 1/17/2017
Todd Job Number: Proposal

2016 Hourly Rates	QA/QC Review $220	Principal PM $220	Senior Modeler $215	Senior Hyd/Eng $210	Senior Geol/Eng $200	Associate Geol/Eng $175	Staff Hydrogeo $150	GIS/ Graphics $110	Admin Costs $100	Total Labor Hours	Total Labor	2% Comm Fee	Other Direct Costs	10% Expense Fee	Total Costs
Task 1: Initial Review of C2VSim															
1.1: Coordinate with DWR on C2VSim		4	24							28	$ 6,040	$ 121	$ -	$ -	$ 6,161
1.2: Assess Kern County Water Budget Data Requirements		6	60	12	8			4		90	$ 18,780	$ 367	$ 200	$ 20	$ 19,367
1.3: Initial Assessment of C2VSim Results in Kern County		2	100	8	8					118	$ 25,220	$ 504	$ -	$ -	$ 25,724
Task 1 Budget	**0**	**12**	**184**	**20**	**16**	**0**	**0**	**4**	**0**	**236**	**$ 50,040**	**$ 992**	**$ 200**	**$ 20**	**$ 51,252**
Task 2: Coordinate with Local Agencies on Water Budget															
2.1: Develop Local Agency Data Request		4	16							20	$ 4,320	$ 86	$ -	$ -	$ 4,406
2.2: Coordinate with Local Agencies on Water Budgets		16	60							76	$ 16,420	$ 328	$ 1,200	$ 120	$ 18,068
2.3: Compile and Review Local Agency Water Budget Data		4	64		40		60	4		172	$ 32,080	$ 633	$ -	$ -	$ 32,713
2.4: Identify Data Gaps		4	40							44	$ 9,480	$ 190	$ -	$ -	$ 9,670
2.5: Water Budget Workshop		8	8					8		24	$ 4,360	$ 70	$ 800	$ 80	$ 5,310
Task 2 Budget	**0**	**36**	**188**	**0**	**40**	**0**	**60**	**12**	**0**	**336**	**$ 66,660**	**$ 1,307**	**$ 2,000**	**$ 200**	**$ 70,167**
Task 3: Revise C2VSim with New Data															
3.1: Verify C2VSim Data and Calibration in Kern County Subbasin			80							80	$ 17,200	$ 344	$ -	$ -	$ 17,544
3.2: Prepare Revised Data for C2VSim Input			60		64		80	8		212	$ 38,580	$ 754	$ -	$ -	$ 39,334
3.3: Apply Revised C2VSim for Kern County Subbasin			260	24						284	$ 60,940	$ 1,219	$ -	$ -	$ 62,159
3.4: Evaluate Revised C2VSim Performance		8	180	24						212	$ 45,500	$ 910	$ -	$ -	$ 46,410
3.5: C2VSim Revision Project Updates		16	16					6		38	$ 7,620	$ 139	$ 1,600	$ 160	$ 9,519
Task 3 Budget	**0**	**24**	**596**	**48**	**64**	**0**	**80**	**14**	**0**	**826**	**$ 169,840**	**$ 3,366**	**$ 1,600**	**$ 160**	**$ 174,966**
Task 4: Generate Current and Historical Water Budgets for Kern County Subbasin															
4.1: Generate Initial Subbasin Water Budgets from Revised C2VSim			40		16		28			84	$ 16,000	$ 320	$ -	$ -	$ 16,320
4.2: Public Review of Subbasin Water Budgets		16	40							56	$ 12,120	$ 242	$ 600	$ 60	$ 13,022
4.3: Generate Final SubbasinWater Budgets from C2VSim			40		8		24			72	$ 13,800	$ 276	$ -	$ -	$ 14,076
4.4: Kern County Subbasin Water Budget Workshop		8	8					8		24	$ 4,360	$ 70	$ 800	$ 80	$ 5,310
Task 4 Budget	**0**	**24**	**128**	**0**	**24**	**0**	**52**	**8**	**0**	**236**	**$ 46,280**	**$ 908**	**$ 1,400**	**$ 140**	**$ 48,728**
Task 5: Technical Report															
5.1: Draft Report	8	12	140	10	20		22	44	4	260	$ 49,140	$ 878	$ 125	$ 13	$ 50,156
5.2: Final Report	4	8	48	4	8		4	22	2	100	$ 18,620	$ 320	$ 300	$ 30	$ 19,270
Task 5 Budget	**12**	**20**	**188**	**14**	**28**	**0**	**26**	**66**	**6**	**360**	**$ 67,760**	**$ 1,198**	**$ 425**	**$ 43**	**$ 69,426**
Task 6: Project Coordination and Communication															
Project Comm./Management		60	8						22	90	$ 17,120	$ 298	$ -	$ -	$ 17,418
Task 6 Budget	**0**	**60**	**8**	**0**	**0**	**0**	**0**	**0**	**22**	**90**	**$ 17,120**	**$ 298**	**$ -**	**$ -**	**$ 17,418**
Project Budget	**12**	**176**	**1292**	**82**	**172**	**0**	**218**	**104**	**28**	**2084**	**$ 417,700**	**$ 8,069**	**$ 5,625**	**$ 563**	**$ 431,957**

Table 2. Estimated Project Schedule

Job Name: Revise C2VSim Model for Kern County Subbasin Water Budgets
Client: Kern River Groundwater Sustainability Agency (KRGSA)
Date: 1/17/2017
Job Number: Proposal



TODD GROUNDWATER MODELING
PARTICIPATING PERCENTAGES
ATTACHMENT 2

Activity Agreement Member	Participating Acreage	Participation Percentage	Initial SSA Budget	Initial Cash Call
Arvin Community Services District	2,560	0.24%	$1,025.79	$512.90
Arvin-Edison Water Storage District	100,031	9.28%	$40,082.51	$20,041.25
Buena Vista Water Storage District	47,810	4.43%	$19,157.51	$9,578.75
Cawelo Water District	46,441	4.31%	$18,608.95	$9,304.47
Henry Miller Water District	26,055	2.42%	$10,440.26	$5,220.13
Kern County	30,000	2.78%	$12,021.03	$6,010.51
Kern County Water Agency	2,230	0.21%	$893.56	$446.78
Kern River GSA****	229,734	21.31%	$92,054.61	$46,027.31
Kern-Tulare Water District	11,160	1.04%	$4,471.82	$2,235.91
Kern Water Bank Authority	20,492	1.90%	$8,211.16	$4,105.58
North Kern Water Storage District	80,037	7.42%	$32,070.89	$16,035.45
Olcese Water District	5,090	0.47%	$2,039.57	$1,019.78
Rosedale-Rio Bravo Water District	43,356	4.02%	$17,372.79	$8,686.39
Semitropic Water Storage District	223,342	20.72%	$89,493.33	$44,746.67
Shafter-Wasco Irrigation District	38,918	3.61%	$15,594.48	$7,797.24
South San Joaquin Municipal Utilities District**	61,621	5.72%	$24,691.59	$12,345.79
West Kern Water District	10,712	0.99%	$4,292.31	$2,146.15
Westside District Water Authority	7,680	0.71%	$3,077.38	$1,538.69
Wheeler Ridge-Maricopa Water Storage District	90,842	8.43%	$36,400.47	$18,200.23
Totals	1,078,111	100.00%	$432,000.00	$216,000.00

Notes:

*Greenfield - included with KRGSA needing to confirm acreage

**McFarland - will be included with SSMUD needing to confirm acreage

***Lamont PUD - half included with KRGSA needing to confirm acreage

DRAFT

KERN
GROUNDWATER AUTHORITY

April 20, 2018

Rodney Palla, Chairman
Kern River Groundwater Sustainability Agency
ADDRESS
Bakersfield, CA 93301

Re: Reimbursement Agreement for Woodard & Curran (RMC) Task Order

Dear Mr. Palla:

The Kern River Groundwater Sustainability Agency (Kern River GSA) and the Kern Groundwater Authority (KGA) are collaborating on a basin groundwater model update to the Department of Water Resources' C2VSim Model and the development of current and historical water budgets for the entire Kern County Sub-basin (Model Update Project). The Model Update Project includes development of the model by Todd Groundwater under a contract with Kern River GSA. In addition, the Model Update Project includes work by Woodard & Curran, who has been retained by KGA to perform work more particularly described in the attached task order (**Attachment 1**). The Kern River GSA has agreed to share the costs of the Woodard & Curran contract related to the Model Update Project, which is identified as subtask 1.2 in the attached task order. Therefore, the Kern River GSA and KGA agree on the following terms and conditions:

1. Each participant signing below will pay its share of the initial proposed budget of approximately $44,928 per the attached table (**Attachment 2**) for the Model Update Project.

2. All payments shall be due 45 days after receipt of an invoice from KGA.

3. It is understood that the proposed budget is an estimate only. If costs for subtask 1.2 increase more than ten (10) percent over the proposed budget, the increase must be approved by Kern River GSA. Costs above the initial proposed budget will be paid in the same percentages in the attached table, unless otherwise agreed.

4. Costs will be reconciled at the end of the Model Update Project and refunds or additional payments will be due 45 days after the final accounting.

If the above terms and conditions are acceptable, please sign and date all copies of this reimbursement agreement and return them to the KGA. A fully executed original will be returned to the Kern River GSA.

Sincerely,

Dennis Mullins
Chairman

Accepted:
Kern River Groundwater Sustainability Agency

By:_____

Title:_____

Date:_____

Engineering Services Contract
Task Order

TASK ORDER NO. W&C-2017-001

Contractor: Woodard & Curran

Services: Groundwater Modeling Support Services

Dated: June 19, 2017

Description of Task:

Woodard & Curran shall provide groundwater modeling support services, as specified in Task 1 below, to Kern Groundwater Authority (KGA) for preparing the Groundwater Sustainability Plan (GSP).

Task 1. Develop Modeling Needs and Approach

Subtask 1.1 Assess Short-term and Long-term Modeling Needs of KGA Member Agencies

- Obtain, from KGA member agencies, information currently on-hand on conceptual models, numerical models, water balance accounting spreadsheets, and other water budget estimates. Compile the information and prepare a summary after preliminary review.
- Meet with the KGA Coordination Committee to obtain information on short-term (e.g. GSP preparation) and long-term (sustainability planning and operation) needs, such as future project analysis needs, spatial and temporal scale of analysis, desired levels of accuracy, and types of questions that might need to be answered by a model.
- Compile a summary list of future KGA modeling analysis needs and evaluate which needs are met by upcoming (Dec 2017) C2VSim-Fine Grid version and which are not met. Evaluate whether spatial and temporal scales of C2VSim-FG is adequate for KGA member agencies.
- Develop modeling options for KGA with due consideration to SGMA schedule. Develop modeling strategies to meet short-term and long-term needs in the most cost-effective manner (limited to a 10 page document)

Subtask 1.2 Review Todd's Scope, Identify Gaps, and Develop Coordination Plan

- Review Todd's data collection scope and data requests forms
- Provide recommendations for improving Todd's data requests forms to align with C2VSim input data formats and requirements for both current version and upcoming version based on our knowledge of future C2VSim enhancements
- Coordinate with DWR to confirm the recommended changes in data collection requests
- Review other components (e.g. C2VSim modification with local data and water budget estimates) of Todd's SOW and provide recommendations for changes in the light of what DWR is planning to do in near future with C2VSim and IWFM and what would be most cost-effective for both KGA and Kern River GSA.
- Identify gaps in meeting KGA modeling needs documented in Subtask 1.1

- Meet with KGA to explain the recommendations, receive feedback, and refine recommendations.
- Meet with Kern River GSA, and Todd to explain the recommendations, receive feedback, and refine recommendations.
- Develop a protocol for review of C2VSim data update by Todd for accurate representation of input data.
- Develop a coordination and communication plan for KGA's technical involvement in Kern River GSA's modeling efforts. (limited to 5 pages)

Subtask1.3. Project Management, Coordination and Communication

Contractor shall provide necessary project management and project coordination services.

Deliverables

Contractor shall provide electronic copies of all deliverable to KGA. The deliverables are:

- Modeling strategies document to meet short-term and long-term needs (limited to a 10 page document)
- Coordination and communication plan for KGA's technical involvement in Kern River GSA' modeling efforts (limited to a 5 page document).

Schedule

The effective date of this Task Order in June 19, 2017 and will continue through June 30, 2018.

Budget

The cost for completion of the scope of work under this Task Order shall not exceed $98,652. Budget cost details are provided in the following table.

Tasks	Labor								Total
	Technical Advisor	Project Manager	Technical Task Lead	Technical Support	Graphics and Administration	Total Hours	Total Labor Costs	Total ODCs	Total Fee
	Ali Taghavi	Saquib Najmus	Reza Namvar	Frank Quan	Desiree Hughart				
	$295	$295	$249	$178	$105				
Task 1: Develop Modeling Needs and Approach									
Subtask 1.1 Assess Short-term and Long-term Modeling Needs of KGA Member Agencies									
Obtain and compile info and prepare summary		4	12	40		56	$11,288	$0	$11,288
Meet with KGA and obtain short- & long-term planning info (1 meeting in Bakersfield & Up to three (3) 2-hour conference calls)		16	16	8		40	$10,128	$330	$10,458
Compile KGA modeling analysis needs & evaluate if C2VSim is adequate	4	12	12	16		44	$10,556	$0	$10,556
Develop modeling options and strategies (limited to a 10 page document)	6	16	16	8	8	54	$12,738	$0	$12,738
Subtotal Task 1.1:	10	48	56	72	8	194	$44,710	$330	$45,040
Subtask 1.2 Review Todd's Scope, Identify Gaps, and Develop Coordination Plan									
Review data collection scope and data request forms		4	4	4		12	$2,888	$0	$2,888
Provide recommendations for data request improvements		4	4			8	$2,176	$0	$2,176
Coordinate with DWR to confirm changes in data request (up to two (2) 2-hour meetings in Sacramento)	4	4				8	$2,360	$0	$2,360
Review other components of Todd's SOW & provide recommendations		8	8	4		20	$5,064	$0	$5,064
Identify gaps in meeting KGA modeling needs per Subtask 1.1		8	12	8		28	$6,772	$0	$6,772
Meet with KGA and obtain feedback & refine recommendations (1 meeting in Bakersfield) including preparation		12	16	12		40	$9,660	$330	$9,990
Meet with Kern River GSA & Todd (one 2-hour conference call) including preparation		4	4	4		12	$2,888	$0	$2,888
Develop a protocol for review of C2VSim data update by Todd	2	4	8	8		22	$5,186	$0	$5,186
Develop a brief coordination & communication plan for KGA's involvement in Kern River GSA's efforts (limited to 5 pages)		8	16		12	36	$7,604	$0	$7,604
Subtotal Task 1.2:	6	56	72	40	12	186	$44,598	$330	$44,928
Subtask 1.3 Project Management, Coordination and Communications		16	8	4	12	40	$8,684	$0	$8,684
Subtotal Task 1.3:	0	16	8	4	12	40	$8,684	$0	$8,684
Grand Total for Task 1	16	120	136	116	32	420	$97,992		$98,652

Authorized Signatures

Kern Groundwater Authority

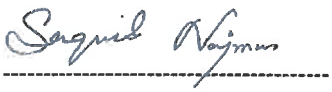
Eric Averett

Contract Manager

8/28/17

Date

Woodard & Curran



Saquib Najmus

Principal

Date

WOODARD & CURRAN (RMC) PEER REVIEW

ATTACHMENT 2

Activity Agreement Member	Participating Acreage	Participation Percentage	Initial SSA Budget	Initial Cash Call
Arvin Community Services District	2,560	0.24%	$106.68	$53.34
Arvin-Edison Water Storage District	100,031	9.28%	$4,168.58	$2,084.29
Buena Vista Water Storage District	47,810	4.43%	$1,992.38	$996.19
Cawelo Water District	46,441	4.31%	$1,935.33	$967.67
Henry Miller Water District	26,055	2.42%	$1,085.79	$542.89
Kern County	30,000	2.78%	$1,250.19	$625.09
Kern County Water Agency	2,230	0.21%	$92.93	$46.47
Kern River GSA****	229,734	21.31%	$9,573.68	$4,786.84
Kern-Tulare Water District	11,160	1.04%	$465.07	$232.53
Kern Water Bank Authority	20,492	1.90%	$853.96	$426.98
North Kern Water Storage District	80,037	7.42%	$3,335.37	$1,667.69
Olcese Water District	5,090	0.47%	$212.12	$106.06
Rosedale-Rio Bravo Water District	43,356	4.02%	$1,806.77	$903.38
Semitropic Water Storage District	223,342	20.72%	$9,307.31	$4,653.65
Shafter-Wasco Irrigation District	38,918	3.61%	$1,621.83	$810.91
South San Joaquin Municipal Utilities District**	61,621	5.72%	$2,567.93	$1,283.96
West Kern Water District	10,712	0.99%	$446.40	$223.20
Westside District Water Authority	7,680	0.71%	$320.05	$160.02
Wheeler Ridge-Maricopa Water Storage District	90,842	8.43%	$3,785.65	$1,892.82
Totals	1,078,111	100.00%	$44,928.00	$22,464.00

Notes:

*Greenfield - included with KRGSA needing to confirm acreage

**McFarland - will be included with SSMUD needing to confirm acreage

***Lamont PUD - half included with KRGSA needing to confirm acreage

DRAFT

KERN GROUNDWATER AUTHORITY

Memorandum

To: Kern Groundwater Authority Board of Directors

From: Terry Erlewine, Basin Coordinator

Date: April 25, 2018

Subject: Woodard and Curran (RMC) Peer Review Cost Sharing and Cost Allocation

---

In February 2017, Kern River GSA (KRGSA) invited Kern Groundwater Authority (KGA) to participate in a joint basin modeling effort, based on DWR's Fine Grid C2VSIM. In March 2017, KGA supported participating in the effort, subject to engagement of a consultant to peer review the KRGSA modeling effort that would be cost shared between KGA, KRGSA and other Kern Subbasin GSAs. The modeling and peer review efforts were originally included in a to be developed Special Activities Agreement #2. Eventually, the KGA Board determined that a new Special Activities Agreement was not needed. Funding for the Modeling and Peer Review effort would be based on Cost Sharing agreements between KGA, KRGSA, and other Kern Subbasin GSAs with costs allocated based on acreage overlying usable groundwater between other GSAs and KGA members.

In June 2017, the KGA Board of Directors authorized Woodard and Curran (RMC) to conduct the peer review of the Fine Grid C2VSIM and approved an initial task order of $98,652. KRGSA agreed to pay for a share of the costs of Subtask 1.2, totaling $44,928. The remaining costs of the Woodard and Curran task order would be paid for solely by KGA. Subsequent to the initial Woodard and Curran task order, a Proposition 1 Grant application was submitted and approved that includes $165,758 for Peer Review of the Fine Grid C2VSIM development. The $165,758 includes the initial task order of $98,652.

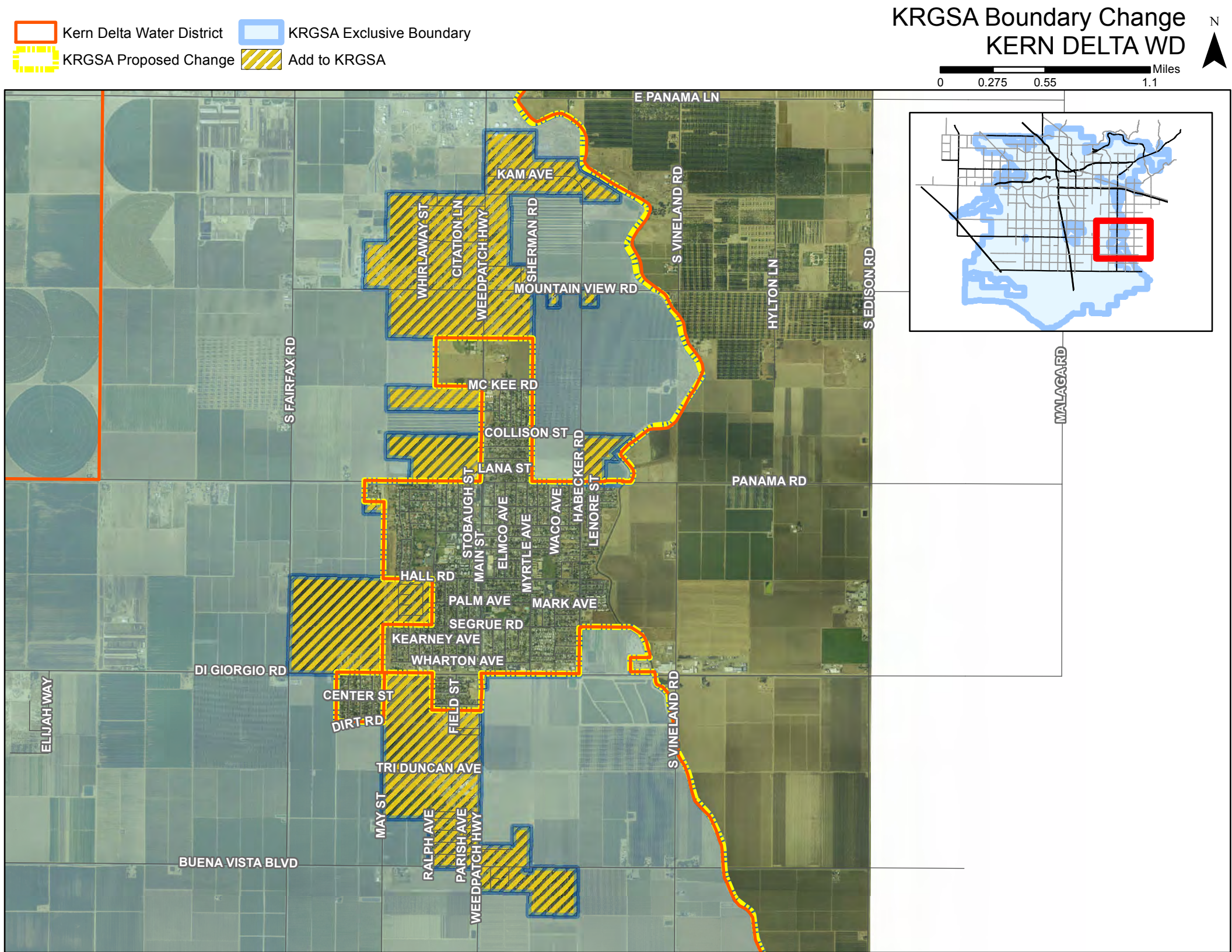
An action is being proposed for the April 25, 2018 KGA Board of Directors meeting to authorize a cost sharing letter with KRGSA and other Kern Subbasin GSAs totaling $44,928 that reflects the already completed Subtask 1.2. A cash call for KGA would also be provided for the identified KGA share of these costs that would be allocated based on acreage overlying usable portions of the Kern Subbasin, with the percentages to be trued

up a some date in the future when final acreages overlying usable groundwater are confirmed.

Additional steps remaining to address the Peer Review authorization and funding needs include:

- Develop Study Scope and approve Task Order for additional tasks identified in the Proposition 1 Grant -- $67,106 ($165,758 - $98,652)
- Authorize one or more cash calls for the $53,724 remaining for additional Woodard and Curran (RMC)

These additional actions will be presented at future KGA Board of Directors meetings.


Kern Delta Water District
KRGSA Exclusive Boundary
KRGSA Proposed Change
Add to KRGSA
KRGSA Boundary Change
KERN DELTA WD
N
Miles
0
0.275
0.55
1.1
E PANAMA LN
KAM AVE
WHIRLAWAY ST
CITATION LN
WEEDPATCH HWY
SHERMAN RD
S VINELAND RD
MOUNTAIN VIEW RD
HYLTON LN
S EDISON RD
S FAIRFAX RD
MC KEE RD
MALAGA RD
COLLISON ST
LANA ST
HABECKER RD
PANAMA RD
STOBAUGH ST
MAIN ST
ELMCO AVE
MYRTLE AVE
WACO AVE
LENORE ST
HALL RD
PALM AVE
MARK AVE
SEGRUE RD
KEARNEY AVE
WHARTON AVE
DI GIORGIO RD
ELIJAH WAY
CENTER ST
DIRT RD
FIELD ST
TRI DUNCAN AVE
MAY ST
RALPH AVE
PARISH AVE
WEEDPATCH HWY
BUENA VISTA BLVD

KERN GROUNDWATER AUTHORITY

Memorandum

To: Kern Groundwater Authority Board of Directors

From: Terry Erlewine; Basin Coordinator
Patty Poire, Planning Manager

Date: April 25, 2018

Subject: Accomplishments and Forward Work Plan

Accomplishments

- Distributed Groundwater Legal Issues writeup
- Distributed Special Activities Agreement #4 to KGA members for GSP Preparation Activities – Initial cash call invoices sent out
- Monthly meeting of Kern Policy Coordination Group including Kern Groundwater Authority, Kern River GSA, Buena Vista WSD and Henry Miller WD.
- Develop agreements for cost sharing for TODD Groundwater modeling and Woodard & Curran (RMC) Peer Review with Kern River GSA and other Kern Sub-basin GSAs
- Posted Stakeholder Survey to KGA website – English & Spanish
- Worked up Presentation for the April 26th Workshop
- Completed 2016 Audit
- Worked with County to obtain domestic well information

Forward Work Plan

- Conduct two outreach workshops in Spring 2018 for stakeholders with Self-Help, with emphasis on all beneficial users
- Complete Communication & Engagement Plan
- Work on and schedule Fall 2018 workshops
- Prepare complete drafts of Basin Setting narrative for GSPs
- Work with County of Kern and interested stakeholders in addressing White Area issues
- Distribute invoices for Todd Groundwater Modeling and Cost-Shared portion of RMC Peer Review
- Coordinate with KGA Districts on management actions to be described in GSP

KERN GROUNDWATER AUTHORITY

Stakeholder Survey

Date: _____

Stakeholder Type (check all that apply):

☐	Agricultural User	☐	Domestic Well Owner/User	☐	Municipal Well Operator
☐	Public Water Systems	☐	Local Land Use Planning Agency	☐	Environmental User
☐	Surface Water User	☐	Native American Tribe	☐	Disadvantaged/Rural Community Resident
☐	City Resident	☐	Food Processor	☐	Industrial User/Oil Producer
☐	Entity monitoring and reporting groundwater elevations in all or part of the groundwater basin				

Note: Please complete your name and contact information if you'd like to be added to the GSA's email and mailing list for future updates and information regarding Sustainable Groundwater Management Act (SGMA) and the Kern Groundwater Authority.

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Email: _____ Telephone: _____

1. Are you familiar with Sustainable Groundwater Management Act (SGMA) regulations? ☐ Yes ☐ No

2. Are you currently working on or discussing groundwater management in this region? ☐ Yes ☐ No

3. Do you own or manage/operate land in this region? ☐ Yes ☐ No

4. Where are you getting your water supply?
   ☐ City or Community Water System ☐ Surface ☐ Groundwater
   ☐ Both Groundwater & Surface Water ☐ Unknown

5. Agriculture & Domestic Well Users: What is your well(s) depth? _____

6. Agriculture & Domestic Well Users: Has your well(s) ever gone dry? ☐ Yes ☐ No
   If yes, when (month/year)? _____

7. If you are an Agricultural User, do you: ☐ Irrigate ☐ Dry Farm ☐ Graze Livestock
   ☐ Other: _____

8. How reliable is your current groundwater supply? _____

9. If you grow crops, do you use irrigation for frost protection? ☐ Yes ☐ No

10. Do you manage water resources? ☐ Yes ☐ No
    If yes, what is your role? _____

11. What is your primary interest in land or water resources management? _____

12. Do you have concerns about groundwater management? ☐ Yes ☐ No

If so, what are they? _____

13. Do you have requests or recommendations regarding groundwater management? ☐ Yes ☐ No

If so, what are they? _____

14. Any other information the Kern Groundwater Authority should be aware of or take into consideration while developing the Groundwater Sustainability Plan (GSP)?

Please return completed surveys to the Kern Groundwater Authority by emailing tbarton@ppeng.com, faxing to (661) 479-7172, or mail to Kern Groundwater Authority, 1800 30th Street, Suite 280, Bakersfield, CA 93301.
Stakeholder Surveys may also be completed online by visiting www.kerngwa.com.

KERN GROUNDWATER AUTHORITY

Encuesta de Partes Interesadas

Fecha: _____

Tipo de Interesado (marque todas que apliquen):

☐	Usuario agrícola	☐	Propietario / usuario de pozo doméstico	☐	Operador municipal de pozos
☐	Sistema de agua público	☐	Agencia local de planificación del uso de la tierra	☐	Usuario ambiental
☐	Usuario de agua superficial	☐	Tribu native americana	☐	Residente de comunidad desventajada/ rural
☐	Residente de la ciudad	☐	Procesador de alimentos	☐	Usuario industrial/Productor de petróleo
☐	Entidad que monitorea y reporta elevaciones de aguas subterráneas en toda o parte de la cuenca de agua subterránea				

Nota: Por favor complete su nombre y la información de contacto si desea ser agregado a la lista de correo electrónico de la GSA y lista de correo para futuras actualizaciones e información sobre la Ley del Manejo Sostenible del Agua Subterránea (SGMA) y la Autoridad de Aguas Subterráneas de Kern (KGA GSA).

Nombre: _____

Dirección Postal: _____

Ciudad: _____ Estado: _____ Código postal: _____

Correo Electrónico: _____ Teléfono: _____

1. ¿Está usted familiarizado con las regulaciones de la ley de Manejo Sostenible del Agua Subterránea (SGMA)? ☐ Sí ☐ No

2. ¿Está usted actualmente involucrado en actividades o discusiones Sobre el manejo de aguas subterráneas en esta regíon? ☐ Sí ☐ No

3. ¿Usted es propietario o administra/opera tierra en esta región? ☐ Sí ☐ No

4. ¿De dónde recibe su suministro de agua?

   ☐ Sistema de agua de la ciudad o la comunidad ☐ Superficie ☐ Agua subterránea

   ☐ Agua subterránea y superficial ☐ No sé

5. Usuarios de pozos Agrícolas Y Domésticos: ¿Cuál es la profundidad de su pozo(s)? _____

6. Usuarios de poza Agrícolas Y Doméesticos: ¿Alguna vez se ha secado su pozo(s)? ☐ Sí ☐ No
   ¿Si la respuesta es sí, cuándo (mes/año)? _____

7. Si eres un usuario agrícola, qual haces: ☐ Irrigar ☐ Granja seca ☐ Pastoreo
   ☐ Otro: _____

8. ¿Qué tan seguro es su suministro de agua subterránea, corrientemente ? _____

_____

_____

9. Si cultiva, ¿utiliza el riego para la protección contra las heladas? ☐ Sí ☐ No

10. ¿Usted administra recursos de agua? ☐ Sí ☐ No

Si la respuesta es sí, ¿cuál es su papel? _____

11. ¿Cuál es su interés principal en el manejo de recursos de agua o tierra?

_____

_____

_____

_____

12. ¿Tiene preocupaciones acerca el manejo de las aguas subterráneas? ☐ Sí ☐ No
Si la respuesta es sí, ¿cuáles son?

_____

_____

_____

_____

_____

_____

_____

13. ¿Tiene used alguna recomendación sobre el manejo de agua subterráneas? ☐ Sí ☐ No
Si la respuesta es sí, ¿cuáles son?

_____

_____

_____

_____

14. ¿Tiene used alguna otra información pertinente que debería tener en cuenta el Kern Groundwater Authority GSA para desarroler el Plan de Sostenibilidad de Aguas Subterránease (GSP)?

_____

_____

_____

_____

_____

_____

Por favor regrese la encuesta terminada al Kern Groundwater Authority GSA enviando un corre electrónico a tbarton@ppeng.com , manduando un fax al (661) 478-7172, o por correo a Kern Groundwater Authority GSA, 1800 30th Street, Suite 280, Bakersfield, CA 93301.

Esta Encuesta de Partes Interesadas también se puede completer visitando la página www.kerngwa.com.

130 N. Garden Street
Visalia, CA 93291-6362
Tel: (559) 636-1166
Fax: (559) 636-1177
www.ppeng.com

Memorandum

To:	Kern Groundwater Authority
From:	Trilby Barton, Public Outreach Coordinator, Provost & Pritchard Consulting Group
Subject:	Stakeholder Survey Results – Progress Report
Date:	April 23, 2018

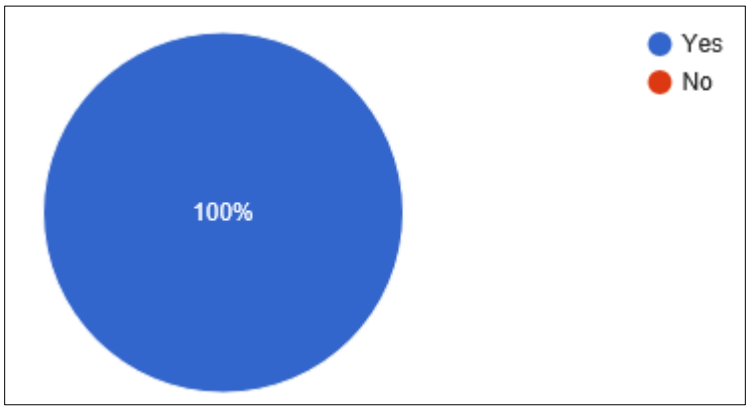
The Kern Groundwater Authority's Stakeholder Survey was finalized during the week of April 16, 2018. Hard copies and the link to the online version of the survey have begun to be circulated throughout Kern County. A Spanish version of the survey will also be circulated and available online once translation is complete (this week). Since the online version went live on April 18, 2018, the Kern Groundwater Authority has received eight responses. This memo summarizes the responses received to date, and the Board of Directors will be updated on monthly basis.

Progress Report of Kern Groundwater Authority Stakeholder Survey Results

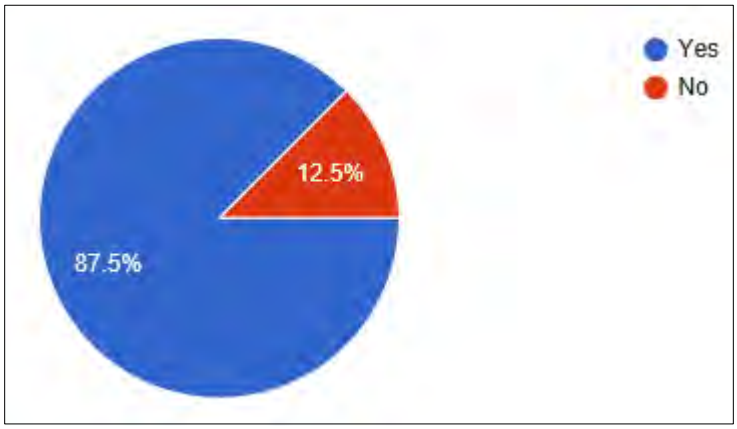
Stakeholder Type: *(8 responses)*

Agricultural User	6	Domestic Well Owner/User	4
Public Water Systems	2	Local Land Use Planning Agency	
Environmental User	2	Surface Water User	4
Native American Tribe		Disadvantaged/Rural Community Resident	
City Resident	3	Food Processor	
Industrial User/Oil Producer		Entity monitoring and reporting groundwater elevations in all or part of the groundwater basin	

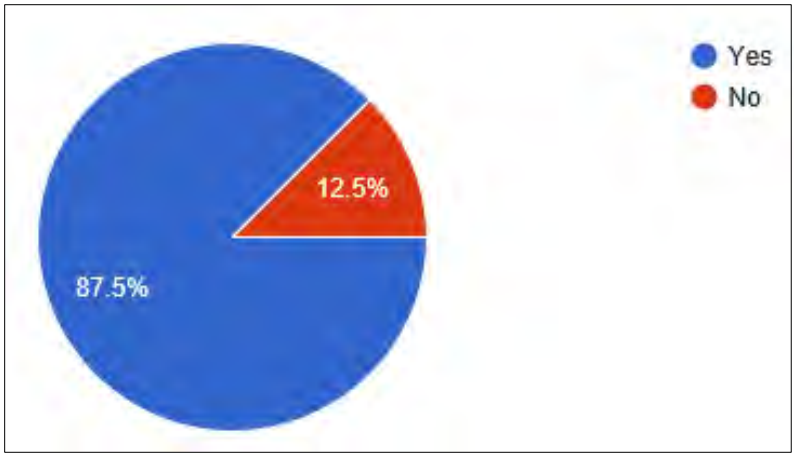
1. Are you familiar with Sustainable Groundwater Management Act (SGMA) regulations? *(8 responses)*



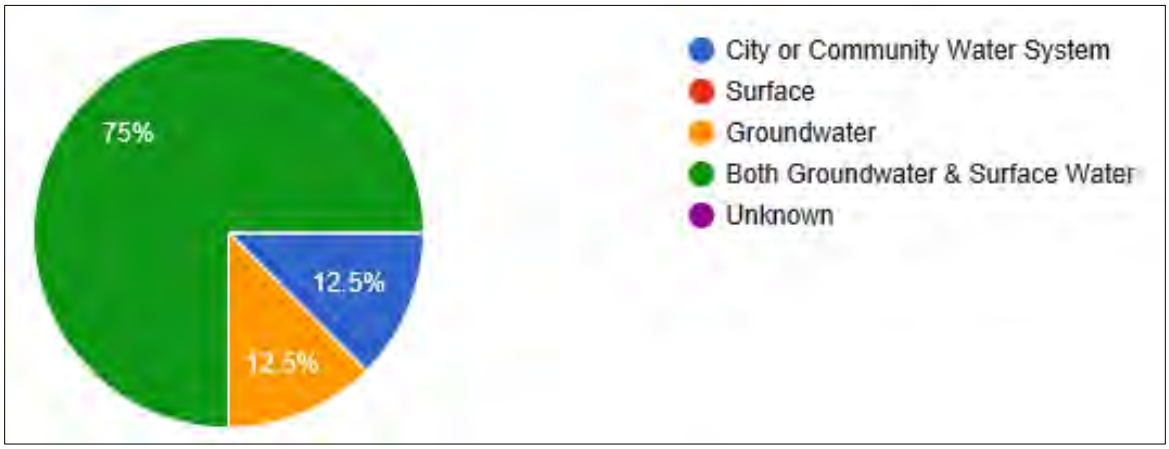
2. Are you currently working on or discussing groundwater management in this region? *(8 responses)*



3. Do you own or manage/operate land in this region? *(8 responses)*



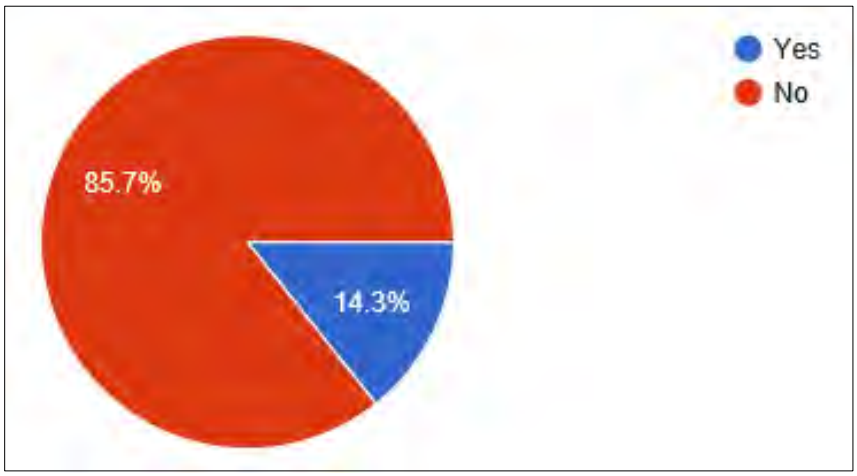
4. Where are you getting your water supply? *(8 responses)*



5. Agriculture & Domestic Well Users: What is your well(s) depth? *(7 responses)*

- 1,000 feet
- 1,200 feet
- 670 feet
- 600 feet
- Multiple wells over 1,000 feet deep, water is drawn from 400 feet
- 900 feet, 500 feet, 950 feet, 850 feet
- 1,800 feet

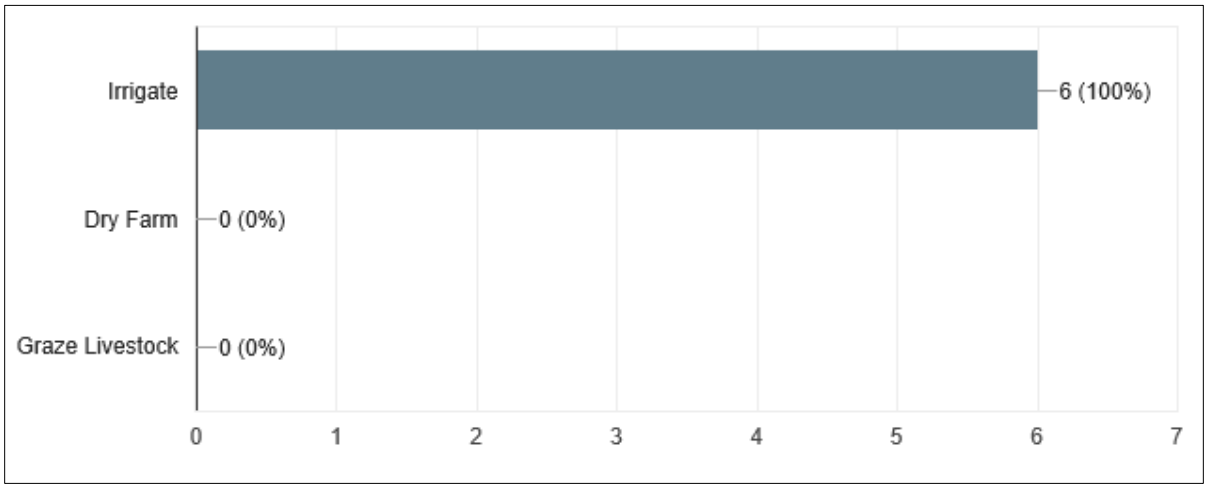
6. Agriculture & Domestic Well Users: Has your well(s) ever gone dry? *(7 responses)*



If yes, when? *(1 response)*

- Three in the last five years

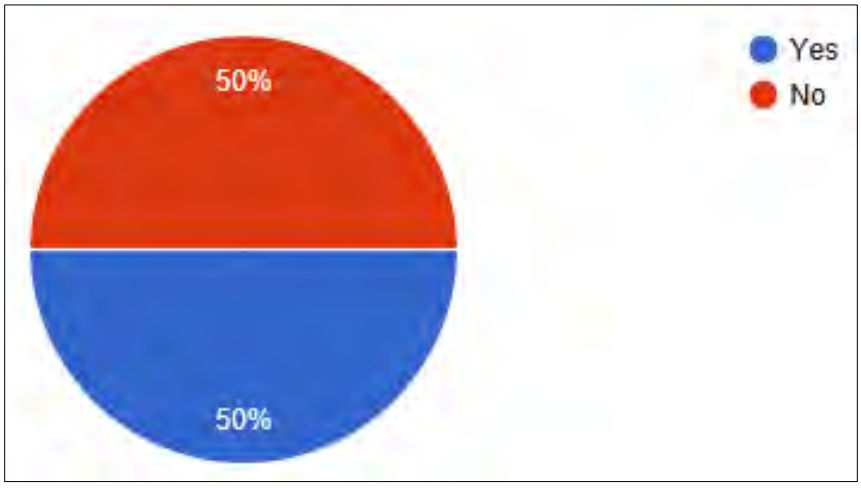
7. If you are an Agricultural User, do you: *(6 responses)*



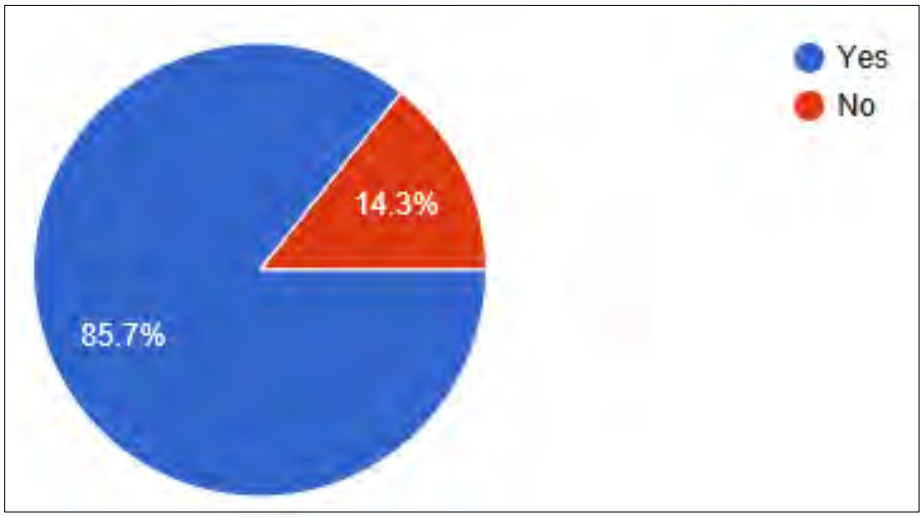
8. How reliable is your current groundwater supply? *(8 responses)*

- Very (other than some high arsenic levels)
- Very reliable
- Prior to SGMA, very reliable
- Excellent
- Unknown given the state undelivered water
- Very reliable
- Reliable
- Reliable

9. If you grow crops, do you use irrigation for frost protection? *(6 responses)*



10. Do you manage water resources? *(7 responses)*



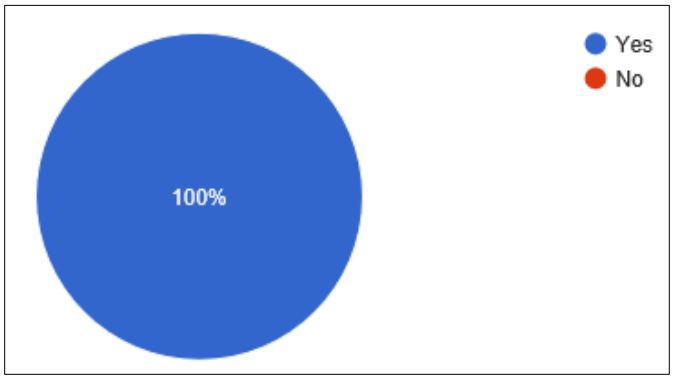
If yes, what is your role? *(6 responses)*

- District manager
- Conservation practices
- Irrigation scheduling
- Owner/Operator
- We do not overwater to save costs
- Operator

11. What is your primary interest in land or water resources management? *(8 responses)*

- Making sure we have enough water to provide the residents of the city
- Conservation
- Agriculture
- To preserve as much as possible for the future
- Safety, Health and Environmental Professional
- Sustainability and cost
- Finite and necessary resource
- Reulation and water

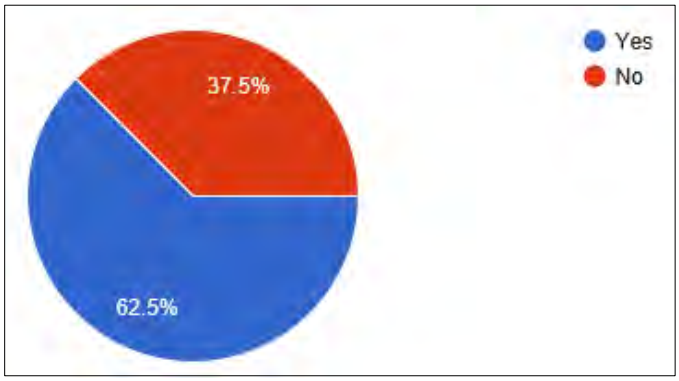
12. Do you have concerns about groundwater management? *(8 responses)*



If so, what are they? *(6 responses)*

- Overpumping, and the subsequent legislation, over regulation
- Long term quantity and quality
- What will be the end result in restrictions and when?
- Delivery system statewide
- I think evapotranspiration satellite technology will help balance our water use with taxation to the land user for overuse, than trying to meter and police all of our wells
- Government regulations and involvement
- Will we have water? What regulatory issues? Loss of production of farm land

13. Do you have requests or recommendations regarding groundwater management? *(8 responses)*



If so, what are they? *(4 responses)*

- Please continue providing information and SGMA and how it will effect day-to-day farmers who may not be as inclined to “self-education” as most.
- Get the state water infrastructure brought up to present day needs and standards
- Make it cost-effective
- Leave as is, just monitor

14. Any other information the Kern Groundwater Authority should be aware of or take into consideration while developing the Groundwater Sustainability Plan? *(4 responses)*

- Thank you in advance for your work. You are doing a great service for our industry. It does not go unnoticed.
- The loss of jobs and complete industries, the tax base from the working class, housing developments, consumption for more homes then the less water for ag
- Out situation took a long time to develop, and will take commitment, patience and time to resolve.
- Don’t have us do unnecessary paperwork. Some of us are just small entities and just want to make a living.